Fall 12-2013

Advisor Knowledge of Disability-Related Needs, Laws, and Accomodation Requirements in Postsecondary Academic Advisement Practices

Rebekah Elizabeth Young
University of Southern Mississippi

The University of Southern Mississippi

ADVISOR KNOWLEDGE OF DISABILITY-RELATED NEEDS, LAWS, AND ACCOMMODATION REQUIREMENTS IN POSTSECONDARY ACADEMIC ADVISEMENT PRACTICES

by

Rebekah Elizabeth Young

Abstract of a Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

December 2013

ABSTRACT

ADVISOR KNOWLEDGE OF DISABILITY-RELATED NEEDS, LAWS, AND ACCOMMODATION REQUIREMENTS IN POSTSECONDARY ACADEMIC ADVISEMENT PRACTICES

by Rebekah Elizabeth Young

December 2013

Since the passage of the Rehabilitation Act of 1973 and the Americans with Disabilities Act in 1990, enrollment of students with disabilities in higher education has risen. In 2007-2008, approximately 11% of undergraduate students reported having some type of disability (U.S. NCES, 2012). Since disability disclosure is optional for students in higher education, it is possible that reported enrollment figures are underestimates.

Despite increasingly equitable access to postsecondary education and demonstration of the academic capability necessary for gaining collegiate admission, students with disabilities are less likely to remain enrolled and successfully earn a degree than students without disabilities. Efforts to bolster student retention, satisfaction, and success rates generally focus on the development and implementation of institutional support services, including academic advisement, that have been designed to meet the unique needs of all students in higher education. Because of the nature of the advisement process, advisors have a unique opportunity to develop relationships with students. As a result of these relationships, advisors are more likely than any other institutional representative to influence student satisfaction, retention, and success. Effectively meeting the advisement needs of students with disabilities requires an

understanding of the unique needs of these students as well as knowledge of disability law and accommodation requirements.

This study used an exploratory sequential mixed methods design to explore current academic advisement practices related to students with disabilities. Semi-structured personal interviews were conducted with 12 academic advisors from Alabama, Louisiana, Mississippi, and Tennessee to characterize academic advising for students with disabilities. Upon completion of the interviews, a questionnaire was developed and used as the foundation of a web-based survey to examine advisors' knowledge of disability-related issues and the influence of this knowledge on advisement practices.

A total of 387 postsecondary academic advisors completed the web-based survey. Statistical analyses revealed statistically significant dependent associations between advisement practices for students with disabilities and advisor status (full-time or part-time), institution type, and advisement type. These findings may provide a basis for modifying current advisor training programs and improve advisement practices related to students with disabilities.

The University of Southern Mississippi

ADVISOR KNOWLEDGE OF DISABILITY-RELATED NEEDS, LAWS, AND ACCOMMODATION REQUIREMENTS IN POSTSECONDARY ACADEMIC ADVISEMENT PRACTICES

by

Rebekah Elizabeth Young

A Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

Approved:

Lilian H. Hill
Director

Richard S. Mohn

Thelma J. Roberson

Kyna Shelley

Susan A. Siltanen
Dean of the Graduate School

December 2013

ACKNOWLEDGMENTS

The author would like to express her gratitude to her brother, Jim Young, for providing support, camaraderie, and motivation throughout this PhD program, and particularly during the writing of this dissertation.

The author would like to express her sincere appreciation to her advisor and chair, Dr. Lilian Hill, for investing her time, sharing her expertise, and providing invaluable guidance and encouragement throughout this research. Appreciation and gratitude are also expressed to the author's dissertation committee members, Dr. Richard Mohn, Dr. Thelma Robertson, and Dr. Kyna Shelley for sharing their knowledge and for always being sources of advice and support.

The author would also like to thank her parents, Sarah and Jimmy Young, for their enduring love and support. They instilled in me a love of learning and work ethic that made completing this dissertation possible. Further, the author would like to thank Pete, Jade, Hattie, and JP Young for their encouragement and loving support without which this dissertation would not have been possible.

The author would also like to thank Amanda Spencer, Susan and Kent Johnson and family, Rebecca Holland, Eve Blakney, Ruth Jones, Lori Wilcher, Quint Hunt, Doug and Jill Rummells, Jennifer Downey, Jennifer Styron, and Mrs. Doris Vines for their friendship, encouragement, and support during the critical moments in this process.

Finally, the author would like to thank the staff of the Institute for Disability Studies for their understanding, support, and encouragement during the writing of this dissertation.

TABLE OF CONTENTS

LIST OF TABLES

Table

LIST OF ILLUSTRATIONS

Figure

CHAPTER I

INTRODUCTION

Overview

Historically, postsecondary education proved inaccessible to, and exclusive of, students with disabilities due in large part to physical, infrastructural, and programmatic barriers. Campus facilities were not equipped with wheelchair ramps, elevators, clear floor space, and other elements essential to accessibility. Offices dedicated specifically to disability services provision were uncommon. Typically, academic programs did not provide accommodations addressing the specific needs of students with disabilities to create equitable and conducive learning environments. However, beginning with the passage of the Rehabilitation Act of 1973, most of the barriers preventing these students from pursuing postsecondary education were removed (Tincani, 2004). This legislation mandated appropriate and equitable educational access to students with disabilities who were enrolled in any public postsecondary institution receiving federal funding. Particularly, Section 504 of the Rehabilitation Act (1973) stated:

> No otherwise qualified individual with a disability in the United States . . . shall, solely by reason of disability, be denied the benefits of, be excluded from participating in, or be subjected to discrimination under any program or activity receiving federal financial assistance (U.S.C. 794, p. 394).

Further, postsecondary educational access for individuals with disabilities was bolstered by the passage of the civil rights law, also referred to as the Americans with Disabilities Act of 1990 (ADA). The ADA guarantees accessibility, while prohibiting discrimination against individuals with disabilities, regardless of receipt of federal funding or

institutional characterization as public or private. Passage of the ADA Amendments Act (ADAAA) of 2008 reinforced prohibition of discriminatory practices against individuals with disabilities by clarifying and reiterating who receives the protections afforded by the original ADA legislation. Further, the ADAAA revised and broadened the definition of the term disability to encompass any impairment, whether physical or mental, that restricts major life activities including learning, thinking, and communicating. Collectively, Section 504, ADA, and ADAAA mandate that institutions of higher education provide reasonable accommodations for students with documented disabilities. Ensuring that students with disabilities receive appropriate accommodations increases the probability of successful course and degree completion (Shaw & Scott, 2003). These accommodations do not provide advantages or guarantee academic success for students with disabilities; rather, they remove or reduce existing barriers in order to create more equitable opportunities for all students (Beecher, Rabe, & Wilder, 1994; Brinckerhoff, Shaw, & McGuire, 2001).

Increased Enrollment of Students with Disabilities in Higher Education

Since the passage of Section 504 of the Rehabilitation Act in 1973, and the Americans with Disabilities Act (ADA) in 1990, the number of college students with disabilities has significantly increased (Beecher et al., 1994; Dalke & Schmitt, 1987; Preece et al., 2005; Preece, Beecher, Martinelli, & Roberts, 2007; Reiff, 1997; Wiseman, Emry, & Morgan, 1988). Due to this sustained trend of increased enrollment, students with disabilities comprised one of the largest and fastest growing minority groups in American higher education in the last quarter of the 20th Century (Beecher et al., 1994; Knight, 2000). A report by the National Center for Education Statistics (NCES) revealed

that 11% of undergraduate students enrolled in American institutions of higher education in 2007-2008 identified themselves as having a disability (U.S. NCES, 2012). Because disability disclosure remains optional for students in higher education, enrollment figures may be considerably underestimated. Although federal legislation resulted in a direct and positive impact on the growth of this student population, it has not contributed to retention, academic success, or degree completion (Barga, 1996; Barnard-Brak, Davis, Tate, & Sulak, 2009).

Challenges for Students in Higher Education

All students entering college must learn to become responsible for their own motivation, decisions, and academic progress. As students attempt to acclimate to life in higher education, the major challenges they confront include decreased contact and interaction with teachers, increased classroom competition, changing personal support networks, and less structured and more intrinsically controlled learning environments, which may prove particularly challenging for students with disabilities (Dalke & Schmitt, 1987). Despite provisions for equitable access to postsecondary education, and demonstration of the academic competency required for enrollment, students with disabilities often struggle to succeed academically and are less likely to successfully complete a college education (Barnard-Brak et al., 2009; Quick, Lehman, & Deniston, 2003). Typically, students with disabilities face greater challenges than their peers without disabilities, and generally, their reported graduation and satisfaction rates are lower. In 2000, the five-year graduation rate for students with disabilities was 53%, compared to 64% for their counterparts without disabilities (Burgstahler, Crawford, &

Acosta, 2001). In addition to the stress associated with the transition from high school to college, students with disabilities may experience difficulties that stem from their anxiety about learning and performance abilities (Knight, 2000; Mercer, 1997). Further, students with disabilities face the challenge of developing the independence and self-advocacy necessary to request and ensure receipt of appropriate accommodations.

Academic Advisement for Students with Disabilities in Higher Education

As the number of students with disabilities enrolled in postsecondary educational institutions has increased, so too have support services specifically designed to provide opportunities for personal and social growth by creating a supportive and communicative educational climate (Wiseman et al., 1988). Despite the increase in disability support services, lower persistence and graduation rates for students with disabilities may be attributed to a continued lack of institutional understanding regarding the very specific needs of these students. Research suggests that few academic advisors and counselors are adequately prepared to address the unique needs of these students (Beecher et al., 1994). Knight (2000) concluded that the "degree of success that students with disabilities experience is, in part, predicated on the quality of advisement" (para. 2). Pardee (1994) reported that developmental advisement positively impacts student satisfaction, retention, and success. While academic advising is one support service that plays an integral role in overall student success, designing advisement strategies specifically for students with disabilities has proven to be challenging, because no one strategy works for all students. Addressing the advisement needs of students with disabilities requires an understanding

of their special needs and how disclosure issues and legislative requirements impact the delivery and effectiveness of such services (Barga, 1996; Beecher et al., 2004).

Ultimately, students in higher education are responsible for their own achievements; however, their academic success may be attributed, in part, to the quality of the academic advisement they receive. While degree completion typically serves as the primary measure of academic success, student involvement, satisfaction, and retention contribute greatly to this achievement (Astin, 1984; Frost, 1991; Tinto, 1987). Each of these factors of academic success may be positively influenced by effective academic advisement which contributes to increased student satisfaction, and ultimately, retention of all students, particularly those with disabilities in higher education (Andrews, Andrews, Long, & Henton, 1987; Frost, 1993; Gordon, 1994; Heisserer & Parette, 2002; Knight, 2000). Academic advisement tailored to meet the needs of students with disabilities generally does not focus exclusively on course selection and scheduling (Bachus, 1989; Brown & Rivas, 1994; Enright, Conyers, & Szymanski, 1996; Fielstein, 1989). Instead, advisors of students with disabilities typically focus on cultivating personal relationships with these students, thereby contributing to increased student satisfaction and connectedness to the institution, which, in turn, contributes to academic success (Bachus, 1989; Brown & Rivas, 1994; Enright et al., 1996; Fielstein, 1989).

Aside from developing personal relationships, advisors who are focused on meeting the needs of students may ascribe to the tenets of the developmental advisement model introduced by Crookston (1972). Developmental advising, a student-centered approach, places emphasis on the concerns, needs, and aspirations of the students

(Gordon, 1994). Through interaction with academic advisors who follow the developmental approach, students learn to solve problems, make decisions, evaluate their personal situations, and, in general, become more critically aware of themselves and their life goals (Crookston, 1972). Developmental academic advising provides opportunities for student development and learning (Frost, 1993) and enhances students' development through empowerment and personal, educational, and career goal evaluation and exploration. O'Banion (1994) expounded upon Crookston's model by introducing the following five steps: (1) life goal exploration, (2) career goal exploration, (3) academic program selection, (4) course selection, and (5) course scheduling. O'Banion suggested that each of these represents a vital component of developmental advising that may enable and enhance student development and success. A close advisor-student relationship that fosters goal exploration allows advisors to assist students in identifying and utilizing available institutional and community resources that are essential to goal attainment (Ender, Winston, & Miller, 1982; Fielstein, 1989). Moreover, empowerment stimulates increased self-efficacy, which builds students' confidence in their own abilities to successfully meet the requirements of their academic program, as well as their personal and career goals (Erlich & Russ-Eft, 2011). Effective developmental advisement produces self-confident students who assume reponsibility for making their own decisions, work to solve their own problems, and play active roles in their own education by setting goals that they believe are obtainable (Crookston, 1972; Fillippino, Barnett, & Roach, 2008).

Academic advisement should not be viewed as merely an activity in which students are provided information regarding course selection and scheduling (Crookston, 1972). Rather, advisement should be recognized as an opportunity for student development and learning (Crookston, 1972; Frost, 1991). Effective developmental advisement emphasizes the individual needs of all students, particularly those with disabilities, and contributes to students' increased academic success (Crookston, 1972; Frost, 1991; Gordon, 1988). An exploration of current advisors' knowledge and behaviors related to the needs of students with disabilities, and legislative requirements for accommodations, could contribute to the development and implementation of more appropriate and effective academic advisement practices.

Academic advisement in higher education plays a critical role in increasing student satisfaction and, ultimately, retention (Andrews et al., 1987; Frost, 1993; Gordon, 1994; Heisserer & Parette, 2002; Knight, 2000). Traditionally, academic advisors are often faculty members who, in addition to their other job responsibilities, have utilized a prescriptive practice to help students choose a major and follow a plan of study that fulfills the requirements for a degree. Crookston (1972) posed that the personal development of students in higher education may be directly and positively impacted by advisors who assist them in exploring and creating long-term life, educational, and career goals. This model of developmental advising reflects the typical institutional mission of total student development and is beneficial to all students, but particularly those with disabilities.

Statement of the Problem

Since the passage of Section 504 of the Rehabilitative Act of 1973, which prohibits discrimination against individuals with disabilities, the number of students with disabilities in higher education has continued to increase (Barnard-Brak et al., 2009; Dalke & Schmitt, 1987; Enright et al., 1996; Hall & Belch, 2000). As collegiate enrollment of students with disabilities has continued to grow, so has the concern in higher education regarding retention and academic success of these students (Earl, 1988; Mull, Sitlington, & Alper, 2001). Academic advisors have a unique opportunity to connect with students and are often the most influential collegiate staff members with whom students come in contact; therefore, their involvement in institutional efforts to enhance student success is crucial (Fielstein, 1989; Frost 1993; Gordon, 1988; Preece, Roberts, Beecher, Rash, Shwalb, & Martinelli, 2007). Academic advisors may have a profound impact on a student's academic and personal development (Frost, 1991; Frost 1993; Gordon, 1988; Preece et al., 2007). By creating a caring relationship in which students receive support from a knowledgeable and concerned institutional representative, advisors enhance the learning environment and increase the likelihood of student success (Ford & Ford, 1989). A review of the literature has established the relationship between academic advisement and retention of all students, including those with disabilities (Astin, 1984; Frost, 1991; Preece et al., 2007); however, limited research exists regarding advisors' knowledge of the specific needs of students with learning disabilities. Further, minimal research has been conducted on academic advisors' knowledge of how the requirements of Section 504, ADA, and ADAAA apply to students

in higher education. Limited research has focused on the influence of advisors' knowledge of the specific needs of students with disabilities and legislative requirements on the development of effective advisement practices and training opportunities that may enhance retention and academic success of these students. An increased understanding of advisors' knowledge of, and practices related to, students with disabilities may promote opportunities to develop skills essential to effective advisement. As advisors' understanding of student needs and development, disability law, and interpersonal communication skills expand, student satisfaction, persistence and success are likely to increase. Consequently, effective academic advisement may contribute to the creation of a positive academic environment and the fulfillment of the postsecondary educational mission of producing well-educated, well-rounded graduates.

The purpose of this study was to examine academic advisement practices in higher education as they pertain to students with disabilities. This study explored academic advisors' knowledge of and practices related to disability law, accommodation requirements, institutional disability support services, and the specific needs of students with disabilities. Further, the study explored whether differences in these variables may be related to advisor status (full-time or part-time), institution type, and advisement type.

This study consisted of two distinct phases, one qualitative and one quantitative, each of which was guided by the following research questions:

Qualitative

1. What are the practices of academic advisors related to students with disabilities?

2. How do academic advisors' practices reflect their knowledge of the specific needs of students with disabilities?
3. How do academic advisement practices reflect advisors' knowledge of disability law and accommodation requirements?
4. How does an advisor's knowledge of institutional disability support services influence his or her advisement of students with disabilities?

Quantitative

5. Are advisement practices related to students with disabilities independent of an advisor's full-time or part-time status?
6. Are advisement practices related to students with disabilities independent of advisement type?
7. Are advisement practices related to students with disabilities independent of the type of institution (two-year, four-year, public, or private) for which the advisor is employed?

Two researcher-developed data collection tools, the *Postsecondary Advisement Practices for Students with Disabilities Interview Guide* (Appendix A) and *Postsecondary Academic Advisor Practices Questionnaire* (Appendix B) comprised of various advising scenario vignettes were used to collect data regarding advisor practices and experiences during the qualitative and quantitative phases, respectively. The survey instrument also contained demographic questions to obtain descriptive information about the participants.

Table 1 summarizes the aforementioned research questions and identifies the data collection instrument and items that were used to answer each.

Table 1

Research Questions

Research Question	Data Collection Instrument	Item
Qualitative		
1. What are the practices of academic advisors related to students with disabilities?	Postsecondary Advisement Practices for Students with Disabilities Interview Guide	6, 7, 8, 9, 10, 12
2. How do academic advisors' practices reflect their knowledge of the specific needs of students with disabilities?	Postsecondary Advisement Practices for Students with Disabilities Interview Guide	11
3. How do academic advisement practices reflect advisor's knowledge of disability law and accommodation requirements?	Postsecondary Advisement Practices for Students with Disabilities Interview Guide	12, 16
Quantitative		
1. How does an advisor's knowledge of institutional disability support services impact his or her advisement of students with disabilities?	Academic Advisement for Students with Disabilities Advisor Questionnaire	13,17
2. Are advisement practices related to students with disabilities independent of an advisor's full-time or part-time status?	Academic Advisement for Students with Disabilities Advisor Questionnaire	2, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39
3. Are advisement practices related to students with disabilities independent of advisement type?	Academic Advisement for Students with Disabilities Advisor Questionnaire	5, 6, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39
4. Are advisement practices related to students with disabilities independent of the type of institution for which the advisor is employed?	Academic Advisement for Students with Disabilities Advisor Questionnaire	17, 18, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39

Justification

Though students with disabilities are ensured increasingly equitable access to higher education, these students, like those without disabilities have no assurance of academic success. While legislative mandates obligate institutions to provide appropriate accommodations for students with documented disabilities, these students must still overcome numerous challenges to succeed. Existing research has established that institutional support services, specifically academic advising, contribute to the academic success of students, particularly those with disabilities (Astin, 1984; Frost, 1991; Preece et al., 2007). Limited knowledge of disability laws, accommodation requirements, and institutional policies may thwart academic advisors' efforts to meet the specific needs of students with disabilities. Though well-intentioned, advisors' failure to adhere to federal regulations and institutional policies may result in negative outcomes for students. Further research focused on advisement practices that pertain to the specific needs of students with disabilities, disclosure issues, and accommodation requirements was needed.

The results of this study provide insight into current practices of individuals providing academic advisement for students with disabilities, particularly as they pertain to disability law and accommodation requirements. A comparison of the data based upon differences in advisor status, institution type, and advisement type identified specific issues upon which training programs for academic advisors may be built. Further, this information identified areas needing improvement which may be used to inform future academic advising practices. The findings of this study may benefit both advisors and

students with disabilities by providing suggestions for potential preparatory training and best practices for advisors which may ultimately better meet the specific needs of these students, thereby enhancing their potential for academic success.

Definition of Terms

For the purposes of this study, the following terminologies were used based upon these definitions:

Academic advisement: Practice in postsecondary education through which postsecondary institutional representatives provide students with guidance and support in order to create increased opportunities for academic success (Crookston, 1972; Erlich & Russ-Eft, 2011; Frost, 1993; Gordon, 1994; O'Banion, 1994).

Academic advisor: Employee of a postsecondary educational institution who, within his or her official capacity, provides guidance and support to students in order to enhance the likelihood of academic success (Crookston, 1972; Erlich & Russ-Eft, 2011; Frost, 1993; Gordon, 1994; O'Banion, 1994).

Academic success: Student achievement of specific educational goals including fulfillment of course requirements, retention, and, ultimately, degree completion (Andrews et al., 1987; Frost, 1993; Gordon, 1994; Heisserer & Parette, 2002; Knight, 2000).

Accommodations: Any assistance coordinated and provided through the institutional office of disability support services to students with disabilities in postsecondary education in order to enhance their potential for academic success (ADA, 1990; ADAAA, 2008; Barga, 1996; Rehabilitation Act, 1973).

Americans with Disabilities Act of 1990: Federal legislative civil rights mandate that bolstered Section 504 of the Rehabilitation Act of 1973 by prohibiting any program or activity, regardless of federal funding status, from discriminating against or excluding individuals with disabilities (ADA, 1990).

Americans with Disabilities Act Amendments Act of 2008: Federal civil rights legislation that restored the original intent of the ADA of 1990 by clarifying and reiterating protections for individuals with disabilities, defining major life activities, redefining the term disability, and prohibiting the dismissal of an impairment as a non-disability based on the use of mitigating measures or aids which may improve the condition (ADAAA, 2008).

Civilian Vocational Rehabilitation Act: Federal legislation establishing a civilian rehabilitation program to provide vocational training, job placement, and counseling services for individuals with both congenital and acquired disabilities; synonymous with Smith-Fess Act (Smith-Fess Act, 1920).

Developmental advisement: Type of academic advisement emphasizing total student development through which advisors assist students in the exploration and creation of long-term life, educational, and career goals, as well as the development of problem solving and decision making skills, in addition to course selection and scheduling (Crookston, 1972; Erlich & Russ-Eft, 2011; Frost, 1993; Gordon, 1994; O'Banion, 1994).

Disability: As specified by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, any documented impairment, of a physical or

mental nature, that limits an individual's ability to perform major life functions including learning, reading, concentrating, thinking, and communicating, thereby meeting the eligibility criteria for receipt of assistance through the office of institutional disability support services (ADA, 1990; ADAAA, 2008; Rehabilitation Act, 1973).

Disability disclosure: Process through which students in postsecondary education provide documentation of a disability to the institutional office of disability resources, thereby qualifying them to receive appropriate accommodations (Preece et al., 2005; Preece et al., 2007).

Disability law: Collective body of legal directives stipulating fair and equitable, non-discriminatory treatment of individuals with disabilities (Barga, 1996; Brinckerhoff, 1996; Preece et al., 2005).

Disability support services office: Designated department or office at each postsecondary institution responsible for verifying student disability status, establishing guidelines for requesting and granting accommodations, and coordinating and providing reasonable accommodations to students with disabilities (Barga, 1996; Cox & Klas, 1996).

Full-time academic advisor: Institutional representative whose official and primary job responsibility is providing guidance and support to students in order to enhance the likelihood of academic success.

Higher education: Education beyond high school that is typically provided by a college or university; synonymous with postsecondary education (Brinckerhoff, 1996; Preece et al., 2007; Wiseman et al., 1988).

Intrusive advisement: Type of academic advisement focused on increasing students' likelihood of success by deliberately intervening to help students who are struggling academically (Earl, 1988).

Part-time academic advisor: Institutional representative who, in addition to other specified job responsibilities, such as teaching, is responsible for providing guidance and support to students in order to enhance the likelihood of academic success.

Postsecondary education: Education beyond high school that is typically provided by a college or university; synonymous with higher education (Barga, 1996; Brinckerhoff, 1996; Preece et al., 2007; Wiseman et al., 1988).

Prescriptive advisement: Type of academic advisement through which advisors provide guidance to students through course selection and scheduling to ensure the fulfillment of specific degree requirements (Brown & Rivas, 1994).

Reasonable accommodations: Assistance provided to students with disabilities through institutional disability support services that do not lower academic standards, alter program or degree requirements, or create an excessive burden on the institution's financial resources (ADA, 1990; ADAAA, 2008; Barga, 1996; Rehabilitation Act, 1973; Shaw & Scott, 2003).

Section 504 of the Rehabilitation Act of 1973: Federal legislative civil rights mandate prohibiting discrimination against or exclusion of individuals with disabilities from any program or activity that receives federal funding (Rehabilitation Act, 1973).

Smith-Fess Act: Federal legislation establishing a civilian rehabilitation program to provide vocational training, job placement, and counseling services for individuals

with both congenital and acquired disabilities; synonymous with Civilian Vocational Rehabilitation Act (Smith-Fess Act, 1920).

Students with disabilities: Collective reference to students enrolled in postsecondary educational institutions whose disclosed and documented disabilities have been verified by disability support services (Barga, 1996; Brinckerhoff, 1996)

Assumptions

For the purposes of this study, the following assumptions were made:

1. Academic advisors participating in this study answered all questions honestly.
2. Academic advisors participating in this study provided academic advisement to students enrolled in postsecondary educational institutions.
3. Academic advisors participating in this study used similar advisement practices for all students regardless of ability, race, gender, age, or background.
4. Academic advisors participating in this study had basic knowledge of disability law and accommodation requirements.
5. Academic advisors participating in this study had knowledge of institutional disability support services.
6. Academic advisors' participation in the personal interviews and completion of the questionnaire in this study represented a valid means of determining how advisement practices may be influenced by knowledge of the needs of students with disabilities, disability law, accommodation requirements, and disability support services.

Delimitations

For the purposes of this study, the following delimitations were recognized:

1. Participation in this study was delimited to postsecondary institutional employees who provide full-time or part-time academic advisement of students within the scope of their official capacities. Student advisors or institutional employees whose job responsibilities do not include student advisement were not included in the study.
2. Academic advising scenarios used for data collection were delimited to physical and learning disabilities.
3. Findings from this research were delimited by the institution type, private or public, and geographic region of academic advisors participating in this study.
4. This study was focused on students with disabilities in higher education and the role of academic advising in contributing to their academic success.
5. The scope of this research was delimited to providing an overview of, and best practice recommendations for, academic advisement for students with disabilities. This study was not intended to provide an evaluation of academic advisement at postsecondary educational institutions.

CHAPTER II

REVIEW OF RELEVANT LITERATURE

Overview

Throughout the history of higher education, academic advisors, through their guidance and support, have contributed to the enhancement of the postsecondary educational experiences of students and increased their likelihood of academic success. The role and value of academic advisement in American postsecondary education has long been examined in the literature. Academic advisement for students with disabilities however, has only gained attention in the past half-century as the presence of students with disabilities in postsecondary educational institutions has increased in response to anti-discriminatory legislative mandates.

The effectiveness of academic advisement may be determined, in large part, by advisors' knowledge of the specific needs of students with disabilities and the application of disability regulations in higher education. This chapter presents a review of literature that provides an historical perspective on disability legislation and its impact on students with disabilities in higher education, as well as a summary of the theoretical framework guiding this study. Further, this chapter presents background information on academic advisement and its influence on student success.

Disability Legislation

Prior to the latter half of the Twentieth Century in America, publicly acknowledged disabilities were primarily associated with military service. The Smith-Fess Act, also known as the Civilian Vocational Rehabilitation Act enacted in 1920 and

amended in 1943, 1954, and 1965, following World War II, and the Korean and Vietnam Wars, respectively, was designed to compensate and meet the needs of veterans who had sustained injuries that resulted in a disability (Welch, 1995). In addition to addressing the needs of these veterans, whose disabilities were acquired through military service, this legislation acknowledged and provided vocational training, counseling, and job placement for individuals with congenital disabilities.

During this period, American civilians with physical or mental disabilities continued to be largely isolated and secluded from society (Welch, 1995). Each amendment to the Civilian Vocational Rehabilitation Act altered perceptions of individuals with disabilities and rehabilitation protocols. Ultimately, these amendments contributed to the recognition of, and benefits for, non-military personnel with disabilities. In the mid-1950s, increased recognition of civilians with disabilities coupled with the effects of the polio epidemic on the general population highlighted the rehabilitation needs of all Americans (Welch, 1995). Though focused on the elimination of racial discrimination, enactment of the Civil Rights Act of 1964 provided a foundation for additional anti-discrimination legislation upon which minority groups, including individuals with disabilities, could demand equality. By the early 1970s, the disability rights movement had garnered the support and recognition necessary to affect rehabilitation legislation.

Rehabilitation Act of 1973

In recognition of the societal disadvantages that existed for Americans with disabilities, and to create equality for these individuals, Congress passed the

Rehabilitation Act of 1973, which replaced the Civilian Vocational Rehabilitation Act. Specifically, Section 504 of this civil rights legislation prohibits any organization or institution that receives federal funds from denying benefits to, excluding from participation in, or discriminating against individuals with disabilities solely because they have a disability. The Rehabilitation Act of 1973 reaffirmed the legal definition of the term disability as established by the Civilian Vocational Rehabilitation Act. To qualify for protection under the Rehabilitation Act of 1973, individuals with disabilities must meet at least one of the following conditions: (a) have a mental or physical impairment that results in substantial limitations of at least one major life function, (b) have a history of such an impairment, and (c) be regarded as having such an impairment. Ultimately, Section 504 of the Rehabilitation Act of 1973 served as the foundation for equitable educational opportunities, whether publicly or privately funded, for all students with disabilities.

The protections afforded by Section 504 guarantee that no *otherwise qualified* students with disabilities will be denied opportunities for a postsecondary education (Hameister, 1989; Mull et al., 2001; Rehabilitation Act, 1973; Scott, 1990). Fulfillment of the conditions for meeting the designation of "otherwise qualified" requires those students seeking admission to a postsecondary educational institution to possess the knowledge, skills, and abilities necessary for meeting the admissions requirements of the educational institution to which they have applied. Educational institutions, through mandated compliance with Section 504 standards, must ensure that their academic programs are readily and equally accessible to students with disabilities (Stage & Milne,

1996). Equal access to programs and services must be provided to students with disabilities in order to create a level playing field and to prevent these students' documented disabilities from hindering their educational opportunities (Stage & Milne, 1996). This equitable accessibility is not limited only to the physical structures on college campuses, but extends to recruitment, admissions, academic accommodations, and any other activity related to academic programs offered by the institution (Brinckerhoff et al., 2001; Welch, 1995). Kalivoda and Higbee (1989) posited that equitable access also requires institutions to provide education regarding disabilities and related issues to their personnel.

Americans with Disabilities Act of 1990

Despite the original intentions of this legislation, the Rehabilitation Act of 1973 failed to provide comprehensive civil rights protection for individuals with disabilities because of its applicability to only those organizations receiving federal funding (Maes, n.d.). Congressional passage of the Americans with Disabilities Act (ADA) in 1990 bolstered civil rights protections for individuals by addressing the limitations of the Rehabilitation Act of 1973. Similarly to the Rehabilitation Act of 1973, the ADA was designed to prevent disability-based discrimination against individuals with disabilities (Feldblum, Barry, & Benfer, 2008; Welch, 1995). In addition to prohibiting discrimination against individuals with disabilities, the ADA specified guidelines and requirements for ensuring physical and programmatic accessibility for these individuals. Though the ADA defines disability similarly to the Rehabilitation Act of 1973, the guarantees and protections of this civil rights legislation are expanded to cover

individuals with disabilities in both public and private programs, regardless of receipt of federal funds (ADA, 1990; Feldblum et al., 2008; Welch, 1995). Collectively, Section 504 of the Rehabilitation Act of 1973 and the ADA were intended to create equal opportunities and accessibility for, and to prevent discrimination against, individuals with disabilities (ADA, 1990; Feldblum et al., 2008; Gormley, Hughes, Block, & Lendman, 2005; National Joint Committee on Learning Disabilities, 2007; Rehabilitation Act, 1973; Welch, 1995).

Through a series of legal cases in which both the lower courts and U.S. Supreme Court diverged from the original intent of the ADA, the civil rights protections afforded by this legislation were diminished. In these legal precedents, the ADA's definition of disability was narrowed by the U.S. Supreme Court's rulings that mitigating measures should be considered in determining an individual's disability status (Feldblum et al., 2008). The court's rulings, when applied generally and erroneously beyond the specific cases to which they applied, led to a reduction in protections and accommodations for individuals whose disabilities could be controlled or mitigated through specific measures such as medication or devices (Feldblum et al., 2008). Further, Feldblum et al. (2008) reported that the Supreme Court's ruling in *Williams v. Toyota (2002*) narrowed the definition of major life activities to include only those that are vital to daily functioning while also asserting that *substantially limits* means to prevent or severely restrict.

Americans with Disabilities Act Amendments Act of 2008

In order to restore the original intent of the ADA and to provide specifications designed to avert future misinterpretations that eliminate protections for individuals with

disabilities, Congress passed the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. The ADAAA (2008) rejected the restrictions established by the courts' rulings and emphasized a broad definition of disability that maximizes the protective coverage of the legislation by encompassing any impairment, whether physical or mental, that substantially limits an individual's ability to engage in major life activities, such as learning, thinking, and communicating, that are essential for academic success in postsecondary education. Specifically, the ADAAA clarifies that an impairment that creates substantial limitations in one major life activity may be considered a disability regardless of its impact on other major life activities. Further, the legislation mandates that correction of, or improvement in, an impairment as a direct result of mitigating measures, with the exception of eyeglasses and contact lens, should not be considered in determining disability (ADAAA, 2008).

In addition to clarification and specificity related to the determination of disability, the ADAAA (2008) directs courts responsible for providing interpretation of the legislation to avoid extensive analysis of the technicalities involved in establishing an ADA recognized disability. Rather, the ADAAA guides courts to focus their efforts on examining whether non-compliant, discriminatory practices that violate the protections afforded by the ADA have occurred within defendant entities. The detailed revisions and reiterations included in the ADAAA serve to create a specific, comprehensive legislative mandate designed to eliminate discrimination against, and protect the civil rights of, individuals with disabilities.

Institutional Response

In compliance with the legal requirements set forth in the aforementioned

disability laws, institutions of higher education have developed generic disability services which are available for, and offered to, any student with disabilities (Brinckerhoff, McGuire, & Shaw, 2002). These generic services have been structured to specifically meet the minimum requirements mandated by Section 504, ADA, and ADAAA. However, individual institutions may choose to exceed the minimum requirements and offer more comprehensive disability services for their students. Whether an institution provides minimal or comprehensive disability services, it must provide equal educational access to all students with disabilities without modifying admission standards or academic program content or requirements for these students (Madaus, 2005).

Further, each institution of higher education is legally required to designate one specific employee to oversee and ensure institutional compliance with disability legislation (U.S. GAO, 2009). Failure to comply with the mandates issued by Section 504, ADA, and ADAAA increases the risk of discrimination against students with disabilities and, consequently, increases the potential for costly litigation (McLaughlin, 1995).

Students with Disabilities in Postsecondary Education

Following enactment of the Rehabilitation Act of 1973 and the ADA in 1990, which prohibited discrimination and guaranteed students with disabilities access to postsecondary education, enrollment figures for these students began to increase significantly (Beecher et al., 1994; Black, Smith, Harding & Stodden, 2002; Dalke & Schmitt, 1987; Eckes & Ochoa, 2005; Garrison-Wade, & Lemann, 2009; Kleinert, Jones, Sheppard-Jones, Harp, & Harrison, 2012; Mull et al., 2001; Preece et al., 2007; Preece et

al., 2005; Reiff, 1997; Wiseman et al., 1988). During the 2007-2008 academic year, 11% of American undergraduate students self-identifed as having a disability (U.S. GAO, 2009; U.S. DOE NCES, 2012). This figure may represent an underestimate since disability disclosure is not a requirement for students with disablities in higher education. Federal disability legislation removed many of the barriers to higher education for individuals with disabilities, thereby increasing the presence of these students on college and university campuses (Tincani, 2004). Advancements in assistive and instructional technology, development of more extensive disability support services, increased public recognition of the abilities and aptitude of students with disabilities, and greater personal independence have also contributed to the increasing numbers of these students in higher education (Prentice, 2002). Similar to their peers without disabilities, students with disabilities enter higher education with the goals of increasing their employability by earning a college degree, gaining independence, and developing new social networks (Kleinert et al., 2012). Enright et al. (1996) suggested that students with disabilities may struggle with low self-esteem and self-efficacy, thus creating a need for individualized support to enhance their likelihood of succes in higher education. Though disability legislation has contributed to increased postsecondary enrollment of students with disabilities, it has not impacted student satisfaction, retention, academic success, or degree completion of these students.

Currently, higher education emphasizes retention and academic success of all students, including those with disabilities. Burgstahler et al. (2001) reported that the five-year graduation rate for students with disabilities in 2000 was 53% while that of their

peers without disabilities was 64%. Students with disabilities typically experience greater challenges than students without disabilities in postsecondary education, and generally, their satisfaction, academic success, and graduation rates have been lower (Getzel, 2008; Mull et al., 2001; Ponticelli & Russ-Eft, 2009; Quick et al., 2003). Despite increasingly equitable access to postsecondary education and demonstration of the academic competency required for enrollment, students with disabilities, when compared with their peers without disabilities, often struggle to succeed academically as they face a myriad of challenges including less frequent contact and interaction with teachers; larger class sizes, which may result in increased competition; changes to personal support networks; and, the expectation of more self-direction and individual responsibility in the learning process once enrolled (Barga, 1996; Dalke & Schmitt, 1987). Consequently, a paradigm shift with a focus on providing support services specific to the needs of these students is occurring (Reiff, 1997; Reiff & deFur, 1992).

Challenges to Student Success

For college freshmen, regardless of disability status, higher education presents challenges in six primary areas of development: (a) academic competence, (b) establishment and maintenance of interpersonal relationships, (c) sexual identity, (d) career and life-style decisions, (e) integrated life philosophy, and (f) maintaining personal wellness (Hameister, 1989; Upcraft & Gardner, 1989). During their transition from high school to college, students are establishing their adult identities by determining who they are, who they want to be, and what they want to achieve in life (Jordan, 2000) while striving to meet the requirements necessary for degree completion. College

students face numerous changes and challenges associated with the transition from high school, including assuming responsibility for, and playing an active role in, their own education. Students with disabilities in higher education encounter the added challenge of advocating for the accommodations they need and may have been accustomed to receiving in high school. The Individuals with Disabilities Education Act (IDEA) (1997) regulates accommodations for students at the secondary level. This legislation requires that individualized accommodations based on the specific needs of each student with disabilities be arranged, provided, and ensured by the school (Madaus, 2005). Due to differences in the provisions afforded by disability legislation governing secondary and postsecondary education, students with disabilities, for the first time, encounter an environment in which accommodations are not simply arranged and supplied (Barnard-Brak et al., 2009; Getzel, 2008; Getzel & Thoma, 2008; Gil, 2007; Madaus, 2005). The transfer of responsibility during the transition from high school to college requires students to demonstrate independence and learn the self-advocacy skills necessary to ensure that they are requesting and receiving appropriate accommodations (Barnard-Brak et al., 2009; Stodden, Whelley, Chang, & Harding, 2001). While this transition presents challenges, Getzel (2008) explained that students in higher education benefit from understanding the process for requesting, and importance of using, accommodations as they pursue a college degree.

Regardless of disability status, college students, particularly freshmen, are more likely to succeed academically if they are motivated and willing to put forth the effort to seek help when necessary (Platt, 1988). In the early 1990s, following enactment of the

ADA, only 1-3% of all higher education students requested accommodations or disability-related services (Hartman, 1993). Numerous factors may impact a student's decision to seek assistance. Students with disabilities may be less likely than their peers without disabilities to seek assistance because they are wary of being stigmatized (Hartmann-Hall & Haaga, 2002; Lechtenberger, Barnard-Brak, Sokolosky, & McCrary, 2012). Further, students with disabilities may feel uncomfortable approaching faculty to request assistance, ask questions, or discuss difficulties they may be experiencing. Trammell and Hathaway (2007) identified lack of goal setting, low self-esteem and self-confidence, and individual beliefs about disability, as three major barriers to help seeking. Additionally, students may fail to seek disability-related accommodations due to an inability to understand and clearly communicate their needs as a result of their desire to create an identity detached from their disability (Barnard-Brack, Lan, & Lechtenberger, 2010; Lechtenberger et al., 2012; Lynch & Gussel, 1996).

Results from the 2002 National Longitudinal Transition Study-2 revealed that almost two-thirds of college students with disabilities did not receive the accommodations necessary for increasing their likelihood of success (Wagner, Newman, Cameto, Garza, & Levine, 2005). Failure to receive appropriate accommodations may also be attributed to students' lack of knowledge of their rights to, or institutional procedures for the request of, accommodations (Barnard-Brak et al., 2009; Palmer & Roessler, 2000; White & Vo, 2006). Some students with disabilities choose not to request accommodations based on their belief that successful completion of high school and subsequent admission to an institution of higher education suggests they no longer

have a disability that requires special accommodations (Wagner et al., 2005). Regardless of the reason, nondisclosure of disability limits students' ability to request and receive appropriate accommodations. Consequently, in the absence of these critical accommodations, students with disabilities may be less likely to succeed academically (Mamiseishvili & Koch, 2012).

The newly acquired level of independence associated with college life often presents the greatest adjustment challenge for students with disabilities as they must learn to balance this independence with academic requirements, specific personal needs, and development of new social networks (Brinckerhoff, 1993; Brinckerhoff, 1996; Brinckerhoff et al., 2001; Getzel, 2008). When coupled with the responsibilities of identifying, requesting, arranging, and ensuring receipt of appropriate accommodations, this newfound independence presents myriad opportunities for students to become discontented, confused, and disengaged as they attempt to navigate within the postsecondary educational environment. As students become discouraged, the likelihood of their continued enrollment and successful progress toward degree completion decreases.

Though unintentional, the language of Section 504 creates an additional challenge for students with disabilities in higher education by declaring that individuals with disabilities are best suited for identifying their own limitations and educational needs (Brinckerhoff et al., 2001). Therefore, they must assume responsibility for disclosing and documenting their conditions, as well as identifying and seeking essential support services. Many students with disabilities may find disclosure particularly difficult

because they have a limited understanding of their disability and its impact on learning, and therefore, are unable to describe it clearly (Brinckerhoff, 1996; Dalke & Schmitt, 1987; Goldhammer & Brinckerhoff, 1992). Getzel (2008) suggested that students often possess limited knowledge regarding how accommodations in high school positively impacted their learning. Consequently, they may be unable to explain their specific learning needs or identify beneficial accommodations and support services.

A student's decision to seek help is multifaceted and complex, and may also be attributed to an institution's disability culture, which is reflective of the attitudes and perceptions of administrators, faculty, staff, and students regarding disabilities (Trammell & Hathaway, 2007). Although students with disabilities in higher education ultimately bear the responsibility for requesting and self-advocating for appropriate accommodations, the disability culture created by faculty, staff, and students influences their willingness to seek the help they need (Dowrick, Anderson, Heyer, & Acosta, 2005; Trammell & Hathaway, 2007). Generally, students' decisions to seek help and their likelihood of success are influenced heavily by their initial impression of, and reaction to, the prevailing disability culture on campus (Hartmann-Hall & Haaga, 2002; Lynch & Gussel, 1996; Trammell & Hathaway, 2007). When students with disabilities perceive an unfavorable disability culture on campus, they are less likely to disclose their disabilities, request accommodations, or succeed academically (Kiuhara & Huefner, 2008). Getzel (2008) reported that students with disabilities too often encounter negativity on college campuses resulting from the beliefs of students, faculty, and staff that they do not belong in higher education because they require special services. A

negative disability culture in which students with disabilities find faculty, staff, and students uninformed of disability-related issues, unaware of students' unique needs, and unreceptive to accommodation requests creates yet another obstacle for these students in their pursuit of higher education (Baker, Boland, & Nowik, 2012; Farone, Hall, & Costello, 1998; Houck, Asselin, Troutman, & Arrington, 1992).

Faculty and student attitudes toward disabilities contribute to the disability culture and may directly influence a student's willingness to seek help and to achieve academic success (Beilke & Yssel, 1999; Karabenick, 2004). Limited understanding of students with disabilities and their unique needs may contribute to perceptions of an unfriendly or inhospitable environment, thereby reducing the likelihood that students with disabilities will request accommodations, become connected to the campus, or succeed academically. Students with disabilities have suggested that although many faculty will willingly accommodate student need requests, the learning environments they create are less than positive (Beilke & Yssel, 1999). Further, students with disabilities have identified lack of support and knowledge of disability-related issues among faculty and administrators as a primary institutional barrier to their willingness to seek help (Greenbaum, Graham, & Scales, 1995; Hill, 1996; Lechtenberger et al., 2012; Rocco, 2002; Wilson, Getzel, & Brown, 2000). Deshler, Ellis, and Lenz (1996) asserted that failure of students with disabilities in higher education is largely attributable to the negative attitudes of faculty and administrators.

Disability disclosure introduces the possibility for rejection and stigmatization, thereby creating fear, anxiety, and distrust, which may create avoidance of the process for

requesting accommodations (Barga, 1996; Barnard-Brak et al., 2009) particularly when the disability culture on campus is not perceived as positive. Rather than disclosing their disabilities upon enrollment in a postsecondary institution, some students may postpone disclosure until they experience academic difficulty (Getzel & Thoma, 2008). By postponing disclosure, the student gauges his or her ability to succeed academically in the absence of accommodations and hopes to avoid the stigma that may be associated with having a disability.

Students with disabilities may also experience difficulties that stem from anxiety about their learning and performance abilities (Knight, 2000; Mercer, 1997). Further, these students may face the challenges associated with stereotypes that characterize them as dependent and isolated (Altman, 1981; Barga, 1996). The added burden of these disability-related challenges increases the difficulty of acclimating to college life, and subsequently, increases attrition rates for students with disabilities. Beecher et al. (1994) described this period and process of adjustment as overwhelming and intimidating for students with disabilities who find themselves away from the security of their families and homes as they attempt to adapt to an unfamiliar and more challenging learning environment.

In contrast to the Individuals with Disabilities Education Act (IDEA) of 1997, which was designed to help K-12 students with disabilities succeed academically, Section 504 and ADA do not include provisions designed to contribute to postsecondary academic success of these students. As a result of the distinctions in disability regulations and accommodations between high school and postsecondary education,

students with disabilities often find themselves struggling to simply endure the higher education environment, thereby diminishing their capacity for academic success. While all postsecondary students benefit from support, students with disabilities often require assistance to remain enrolled and progress toward degree completion (Mull et al., 2001). Institutions of higher education interested in boosting retention rates and assisting students with disabilities in their quest to successfully complete degree requirements may enhance efforts to provide necessary and appropriate accommodations and support services for these students (Tuttle, 2000; Winston & Sandor, 1984).

Theoretical Foundations

Designing and delivering support services that positively impact the academic success of students with disabilities necessitates an appreciation for the development of these students in a postsecondary educational environment. Collectively, Social Learning Theory (Bandura, 1977b) and the developmental advisement model (Crookston, 1972; O'Banion, 1994) provide theoretical guidance for this study by offering insight into a process through which students with disabilities may develop the skills essential for academic success.

Social Learning Theory

Researchers have sought to understand what factors—emotional, environmental, behavioral, or intellectual, contribute to human development. Cognitive development theories, in particular, posit that human development is an intellectual process. Bandura's (1977b) Social Learning Theory posed that learning and human development are both largely influenced by the intellectual processes through which an

individual creates knowledge and understanding of his or her social environment. Specifically, Bandura (1977b) suggested that human behaviors and related development may be attributed to the observation of the behaviors of others. The observer's cognitive processing and interpretation of the responses to the observed behaviors may motivate the modeling or imitation of these actions, particularly if the action will yield expected benefits or alleviate challenges (Bandura, 1977a; Dulany, 1968). As a student observes actions or behaviors for which the observed consequences are perceived as positive, he or she may imitate the behavior in order to reap the perceived rewards. As the student models and begins practicing the observed behavior, he or she will be monitoring the consequences of the newly adopted behavior. By rewarding benefits of the new behavior through positive reinforcement of the behavior, the likelihood of its long-term adoption and maintenance is increased. Should the student fail to experience the expected rewards, he or she is not likely to continue the behavior.

Human development and learning also occur as individuals integrate information from social experiences, including conversations, disciplinary actions, and modeled behaviors. Individuals develop their own thoughts and ideas regarding how to respond to these experiences and how to seek out desirable social environments (Altman, 1981; Grusec, 1992). It is through these cognitive processes that individuals develop self-confidence and self-efficacy, which directly impact the decisions they make, the factors that motivate them, and how they will handle challenges and setbacks. Bandura (1977b) described this process through which the environment influences behavior and, in turn, the behavior influences the environment as reciprocal determinism.

Reciprocal Determinism

Self-concept is the most crucial factor contributing to the development of individual attitudes and self-confidence (Altman, 1981; Rokeach, 1973). Within the postsecondary environment, the self-concept and, consequently, self-confidence and self-efficacy of students with disabilities are impacted by a variety of the members of, and the relationships within, the campus community. Particularly, effective student advisement may contribute to the increased self-efficacy and self-confidence of these students. Affirmative interactions with students, advisors, faculty, and staff in postsecondary settings positively influence the level of development and socialization of students with disabilities in higher education (Altman, 1981). As students with disabilities gain confidence and self-assuredness, they tend to become more socially engaged and involved in the campus community (Mangold, Bean, Adams, Schwab, & Lynch, 2003; Padgett & Reid, 2003). Increased self-efficacy and self-esteem enhance students' abilities to cope (Bandura, 1977a), and subsequently positively impact their connections to, and involvement in, the collegiate environment (Saracoglu, Minden, & Wilchesky, 1989). This increased involvement in campus life allows students with disabilities to seek out and create opportunities through which they may gain more self-confidence.

Bandura (1977a) posed that as individuals receive social affirmation of their ability to succeed despite difficult circumstances, and receive the provisional support and assistance necessary for effective performance, they become more likely to demonstrate greater effort, resiliency, and confidence, thereby enhancing their likelihood of success in future, more challenging endeavors. Over time, in a positive educational environment, all

students, including those with disabilities, can begin to adopt and maintain new behaviors based on the perceived benefits of their own actions rather than those of others (Schunk, 1991). As these students set and achieve their goals, their self-confidence is boosted through the reaffirmation they receive (Bandura & Cervone, 1983; Elliott & Dweck, 1988; Schunk, 1985; Schunk, 1991). Recognition and appreciation of the ability to succeed enriches the self-efficacy of these students (Bandura & Cervone, 1983; Schunk, 1991). Consequently, they set and strive to achieve more lofty goals (Schunk, 1991).

Continued, persistent success further strengthens the self-efficacy of students with disabilities, enhances their abilities to cope with otherwise intimidating situations, and creates expectations of future success (Schunk, 1991). Saracoglu, Minden, and Wilchesky (1989) suggested that higher levels of self-efficacy and self-esteem buffer students from the potentially stressful factors associated with the adjustment to higher education and contribute to their likelihood of success. Collectively, these consequences of goal achievement demonstrate personal mastery and provide assurance that sustained efforts, even against the most difficult obstacles, will yield desired results (Bandura, 1977a). Through personal mastery of academic and social challenges, students with disabilities become less vulnerable to anxiety and stress and continue to expect success in their academic and personal endeavors (Saracoglu et al.,1989).

Developmental Advisement Model

Rooted in cognitive development theories, Crookston (1972) introduced a model for developmental academic advising in which he posed that advisement was not merely a prescriptive activity in which students are provided information regarding course

selection and scheduling. Rather, Crookston suggested that advisement should be recognized as an opportunity for student development and learning. Through its student-centered approach, developmental advisement addresses and focuses on student aspirations, needs, and concerns (Brown & Rivas, 1994; Crookston, 1972; Gordon, 1994; Tuttle, 2000). Barga (1996) suggested that within a postsecondary educational environment, academic advisors may serve as benefactors for their students by listening, providing emotional support, and advocating on their behalf. In addition to emphasizing the needs of each student, Thomas and Chickering (1984) explained that the model of developmental academic advising is founded on the notion that all individuals are unique and diverse and should be respected and appreciated for their differences. Brown and Rivas (1994) suggested that effective advisement requires awareness of each student's current stage of development in order to meet his or her specific needs and to encourage further growth and achievement.

As a result of their relationships and interactions with developmental academic advisors, students gain critical problem-solving and decision-making skills, while also learning to conduct self-evaluation, which allows them to become more aware of their life goals and the strides they are making toward achieving these goals (Crookston, 1972). The developmental approach to advisement contributes to student development and learning (Frost, 1993) by creating opportunities for empowerment through the exploration and evaluation of personal, educational, and career goals.

Rooted in Crookston's (1972) model, O'Banion (1994) introduced five fundamental elements of developmental advisement: (a) life goal exploration, (b) career

goal exploration, (c) academic program selection, (d) course selection, and (e) course scheduling. Effective utilization of these components creates opportunities to positively impact student development and success. The process of developmental academic advisement creates a close personal relationship between the student and the advisor, which helps the student achieve his or her personal, educational, and career goals through introduction to, and subsequent utilization of, available institutional and community resources. The close advisor-student relationship and goal exploration assists advisors in empowering students to recognize and access available institutional and community resources that are essential to goal attainment.

Erlich and Russ-Eft (2011) explained that student empowerment associated with developmental advisement fosters self-efficacy and contributes to self-assurance. As students gain self-confidence, they recognize, appreciate, and believe in their own abilities to successfully attain their academic, personal, and career goals (Erlich & Russ-Eft, 2011). Through their relationships with developmental advisors, students gain self-confidence and independence, as well as critical decision making, problem solving, and goal setting skills. Further, through the developmental advisement process, students assume responsibility for, and become actively involved in, their own higher education. Utilization of this developmental academic advising model may enhance the development of students with disabilities in higher education and increase their potential for successful degree completion.

Collectively, Bandura's (1977b) Social Learning Theory and Crookston's (1972) developmental academic advisement model create a theoretical foundation informing

this study of advisement practices for students with disabilities. The academic success of students in higher education, specifically those with disabilities, may be affected by numerous external and internal factors. Thomas and Chickering (1984) asserted that a students' feelings, experiences, and development outside of the classroom contribute significantly to their performance in the classroom. Thomas and Chickering also explained that students' experiences in the classroom and other academic environments frequently contribute to their interests, behaviors, and activities outside the classroom. These assertions reinforce Bandura's (1977b) definintion of reciprocal determinism.

Students with disabilities who are experiencing anxiety, isolation, frustration, and a lack of self-confidence may struggle to succeed academically. As developmental academic advisors build relationships and provide assistance in goal exploration and identification, students with disabilities may feel more self-confident and less anxious and frustrated. These changes in the students' feelings and experiences may contribute to greater success in the classroom, which will likely contribute to greater self-confidence. Bandura (1977a) contended that once individuals have performed well enough to achieve a specific goal, they set another more lofty and ambitious goal, which they become dedicated to attaining. In this manner, self-confident behavior of students with disabilities influences their academic environment and their success in the academic environment improves their self-confidence and positively influences their behavior.

Through exposure to developmental academic advisement, all students may learn and develop new behaviors, knowledge, and skills by observing the behaviors of, and receiving encouragement and support from, their advisors (Astin, 1984; Drake, 2011;

Metzner, 1989; Wilder, 1981). This learning process fosters the self-assurance necessary for students with disabilities to make, and assume responsibility for, their own decisions to solve problems and to play an active role in creating an academic environment in which they can be successful (Ramos, 1997). Students who model and receive positive reinforcement for the successful behaviors they have observed are more likely to become poised, assertive, and certain of their capabilities to successfully complete the requirements for a college degree (Drake, 2011). Consequently, they are more likely to experience greater satisfaction with, and connectedness to, their learning environment (Wilder, 1981). Thus, the likelihood of retention, academic success, and degree completion of students with disabilities increases, and the best interests of both the students and the institutions of higher education in which they are enrolled are served (Drake, 2011).

Academic Advisement in Higher Education

History

For over two centuries following the inception of American higher education at Harvard College in 1636, academic advisement was not warranted. The original intent of higher education in America was to utilize a classical Puritan curriculum to formally educate morally upstanding ministers, doctors, and lawyers, who would function as the future civic leaders of a developing society (Kuhn, 2008). During the first century of American higher education, all students were enrolled in the same courses and shared living space with their instructors (Habley, 2003; Kuhn, 2008). Early institutions of higher education required minimal staff: a president, two teachers who did not specialize

in any particular field, but rather, taught various courses, and usually, two tutors (Brown, 1862; Lucas, 2006). Throughout this period, the president and faculty of the institution served *in loco parentis*, or in place of the parents, and assumed responsibility not only for the education of the students, but for providing moral guidance, discipline, and oversight of extracurricular activities. In fact, students and faculty shared a common living environment and were together for meals, recreation, prayer, and instruction (Kuhn, 2008).

Over time, the relationship between faculty and students became more formal and restrictive. By the 1870s, students had begun demonstrating their resentment of the inflexible policies governing educational institutions (Kuhn, 2008). Faculty and students no longer shared personal relationships. To express their discontent, students rebelled against institutional policies and were subsequently punished, thereby furthering the detachment between the two groups. The development and implementation of the elective system in the 1870s provided students with course options and necessitated the need for academic advisement (Kuhn, 2008). Students required faculty guidance in determining the most appropriate path for successfully achieving their educational goals. Additionally, the increased course offerings provided faculty with opportunities for specialization and resulted in institutional growth and complexity.

Critics feared that students would not use the elective system wisely, and therefore, would decrease the value of their education (Kuhn, 2008). In response to the critics, academic advisement was proposed as a means of guiding students to appropriately choose electives that would prove beneficial in their progression to degree

completion. Further, proponents of academic advisement believed that the process would reengage students and faculty and build positive relationships between the two groups. Recognizing the importance of providing guidance to students, the first formal system of academic advisement was established at Johns Hopkins University in 1877 (Kramer, 2003). In 1886, Johns Hopkins University President, Daniel Coit Gilman, referred to an individual who provides academic, social, or personal guidance as an advisor and explained that this individual should be responsible for listening to student problems, acting in the best interest of students, and ensuring that students are following the appropriate course of study (Kuhn, 2008). Institutional leaders recognized the value of advisors in an elective educational system and shared expectations similar to those outlined by President Gilman. Despite the inclusion of academic advisement as a support service for students in higher education, no specific measures were implemented to determine the successfulness of this process.

Raskin (1979) explained that formal advisement processes had been adopted by the majority of institutions of higher education by the 1930s. However, as the American higher education system continued to grow and evolve during the early to mid-twentieth century, the academic advisement system was weakened. Increased faculty roles and responsibilities and associated time constraints coupled with a lack of formal incentives contributed to this decline in the process of academic advisement (Frost, 1991).

Since the 1970s, assessment of academic advisement processes has increased both in frequency and value. Extant research suggests that academic advisement is related to student satisfaction and retention, thereby increasing the significance of advisors within

higher education. Frost (1991) suggested that academic advisement is not merely a process for assisting students in the selection and scheduling of courses, but is an instrumental tool in student success. As institutions continue to focus their efforts on student retention and success, identifying successful advisement practices has become increasingly important.

Advisement Practices

The implementation of academic advisement in higher education was a direct response to students' needs for guidance in an educational system in which the appropriate selection of elective courses was necessary for satisfactory degree progress and completion. Further, academic advisement was intended to help rebuild personal relationships between faculty and students in order to enhance the educational environment. Since its inception, the majority of academic advisement has been shouldered by faculty (Habley, 2003). Assigning advisement responsibilities to faculty often proves advantageous not only because it reduces institutional costs, but provides students with opportunities to interact with respected institutional representatives who are knowledgeable of department specific academic programming and career options for graduates (King & Kerr, 2005; Wallace, 2013). Though some institutions of higher education have created advising centers staffed by full-time advisors, advisement in most institutions remains a responsibility of faculty, despite increased teaching, research, publication, and service demands (Allen & Smith, 2008; Habley, 2004).

Academic advisement is an ever-evolving, fluid process purposed for meeting the needs of students and institutions in the increasingly diverse environment of higher

education (Jordan, 2000; Wallace, 2013). Light (2001) asserted that quality academic advisement focused on individual needs may be the most undervalued, yet most crucial feature impacting student retention and success in higher education. Generally, academic advisement, whether practiced by faculty or other institutional advisors, follows one of three main approaches: prescriptive, developmental, or intrusive.

Prescriptive advisement. Much as a physician prescribes a course of treatment for a patient who is ill, prescriptive advisors prescribe the appropriate course of study for students to effectively fulfill their degree plans. Frost (1991) described prescriptive advising as a one dimensional activity with a primary goal of appropriate course selection. In the prescriptive relationship, advisors rely upon their knowledge of academic program requirements to direct students in course selection and scheduling. Advisors provide students with information concerning course requirements and prerequisites, withdrawal and drop deadlines, as well as program specific guidelines (Jordan, 2000; Laff, 1994). In prescriptive advisement, the advisor is an authority who possesses knowledge which is transferred to the student (Fillippino et al., 2008). Jordan (2000) suggested that the nature of the information being transferred from advisor to student in the prescriptive advising environment does not necessarily require human contact and may be guided or enhanced through the utilization of technology.

Generally, prescriptive advisement is driven by the campus registration cycle (Fillipino et al., 2008) and requires a smaller time commitment from advisors. Prescriptive advisement is the most often used and most beneficial approach for faculty with large advisee rosters. A review of each student's degree plan followed by an

assessment of the student's current progression within that plan of study allows the advisor to identify unfulfilled requirements and direct students accordingly. Typically, prescriptive advisement successfully guides students through their degree programs. However, students play a passive role in this advisement approach (Lowenstein, 2005) and are not required to assume responsibility for their decisions, as they rely on the advisors' recommendations, or prescriptions, regarding course selection, scheduling and degree requirements.

Developmental advisement. Developmental advisement encompasses the basic tenets of prescriptive advisement while also employing practices that contribute to student development. Lowenstein (2005) argued that though the purpose of advisement in higher education is to ensure that students are fulfilling their academic degree plan requirements, the ultimate objective of this support service should not be to merely provide information. Students and advisors both play an active role, not only in selecting and scheduling courses, but exploring students' personal, educational, and career goals (Crookston, 1972; Frost, 1991; Jordan, 2000; Melander, 2002). Developmental advisors recognize that students' backgrounds, personal characteristics, and life goals are intimately related to their academic goals and decisions (Grites & Gordon, 2000). Academic advisors are responsible for providing students with pertinent information and creating a supportive environment in which students are free to use that information to make decisions that best meet their specific needs (Jordan, 2000; O'Banion, 1994). Rather than merely prescribing a specific course of action for fulfilling degree requirements, developmental advisors refer their students to appropriate resources and

help them use those resources to determine the most effective means of meeting their academic goals. According to Chickering (2006), advisors who are interested in impacting student success, and who recognize the relationship between student development and success, tailor their practices to contribute to the academic, social, and personal development of students. Fillipino et al. (2008) identified the major objectives of developmental advisement as (a) increasing student awareness of the relationship between education and life, (b) setting realistic life goals and developing a plan for achieving these, (c) creating awareness of life beyond college, and (d) encouraging and fostering students' decision-making skills and adoption of behaviors to fulfill those decisions.

Through encouragement of student goal exploration, developmental advisors help students to become active partners, and not just participants, in their own advisement (Kramer, 1988; Winston & Sandor, 1984). This shared responsibility involves students in determining and pursuing academic goals that best meet their individual needs. Fundamentally, developmental advisement follows an individualized, student-centered approach and is characterized by the shared responsibility that emerges as a result of the interpersonal relationships that evolve between the advisor and each student. Melander (2002) defined student-centered advisement, not as an approach in which increased resources and efforts are dedicated to students, but one in which academic programs and services are designed to, and delivered via platforms that, best meet the needs of students. Jordan (2000) asserted that these advisor-student relationships should be built on authentic communication, not on shallow or phony exchanges that create superficiality.

These relationships contribute to an environment in which students receive encouragement and learn to solve problems, make decisions, and evaluate their own progress (Crookston, 1972; Frost, 1991, 1993).

Frost (1991) identified four attributes that distinguish developmental advisement: (a) developmental advisement is a continuous process through which purposeful relationships are built, (b) the process of developmental advisement promotes student growth based on individual needs, (c) developmental advisement is designed to provide assistance in the exploration, setting, and achievement of individual goals, and (d) development advisement requires a caring, friendly relationship which may be initiated by the advisors, but is appreciated and maintained by both the advisor and the student.

Intrusive advisement. Intrusive advisement couples a deliberate intent to intervene with the basic principles of both prescriptive and developmental advisement. Earl (1988) suggested that intrusive advisement may prove beneficial for enhancing the motivation and likelihood of success for students who are struggling academically. Generally, an intrusive approach to advisement is utilized when working with small numbers of students who are at high risk of academic failure due to specific characteristics or background issues that may interfere with their potential to succeed (Fillippino et al., 2008). Intrusive advisors, out of concern for students who are experiencing academic difficulty, deliberately and directly approach students to offer guidance and assistance rather than waiting for the students to acknowledge their need for, and request, help.

Intrusive advising is most helpful for students whose academic struggles result from motivating factors, rather than knowledge or skill deficiencies (Earl, 1988). Advisors who adopt an intrusive approach will focus on helping students recognize their own academic difficulties early enough to seek out beneficial resources and implement remedial measures that will maximize the potential for academic success. Intrusive advisement relies on advisors to directly intrude on students in academic crisis in order to provide motivation to seek assistance. Through this intrusion, advisors reach out to students during that critical time before it is too late to prevent academic failure.

Academic Advisement: A Support Service for Students with Disabilities

Typically, support services for students with disabilities in higher education are coordinated through institutional offices of disability services and resources. Generally, these offices ensure that students with disabilities receive the appropriate accommodations necessary for providing equitable educational access; however, these offices may lack the resources and capacity to meet more specific academic needs of these students. Another institutional support service, academic advisement, has emerged both as a complement to the efforts of the disability services and resources offices and a viable means through which to identify and address the particular academic needs of each student. Advisors are in a unique position to contribute to student development by identifying and anticipating students' needs, offering guidance and assistance, and coordinating available resources (Kramer & Spencer, 1989). Creamer (2000) described academic advisement as a component of higher education that requires an understanding of student needs and behaviors and knowledge of institutional culture to assist students in

planning and achieving their educational and life goals. Frost (1991) suggested that effectively meeting the needs of students with disabilities requires advisors to appreciate and acknowledge the abilities of these students and the challenges that they face, demonstrate a positive outlook concerning, and encourage, their integration into the college environment, provide linkages to appropriate support services, and advocate for their unique needs. Academic advisement, when specifically tailored to meet the needs of students with disabilities, focuses on helping these students set realistic goals, identifying the most effective course of action for goal attainment, and introducing, and providing connections to, available institutional support services (Abelman & Molina, 2002; Ender & Wilkie, 2000; Schreiner & Anderson, 2005).

Personal Relationships

Academic advisement represents the only structured activity in higher education available to all students through which they participate in ongoing, one-on-one interactions with an institutional representative (Habley, 1994; Jordan, 2000). As a result of these individual relationships, academic advisors are often the most influential college staff members with whom students come in contact; therefore, their involvement in institutional efforts to enhance student success is crucial. Provision of individualized support for students with disabilities through advisement and other general student support services yields four significant benefits including: (a) compatibility with the integrated services emphasized in the ADA, (b) development of student independence, (c) demonstration of institutional commitment to understand and meet the needs of students, regardless of disability status, and (d) identification of specific disability-related

training issues needed at the institution (Enright et al., 1996). Forrest (2003) contended that the most critical contribution made by advisors who provide individualized support is unwavering support and encouragement for students with disabilities who have entered higher education with a desire to succeed and a willingness to try.

Academic advisement in higher education is described by Tuttle (2000) as a distinctive blend of both academic and student affairs that plays a critical role in increasing student satisfaction and, ultimately, retention, regardless of disability status (Andrews et al., 1987; Bachus, 1989; Crockett, 1979; Ender, 1994; Ender et al., 1982; Ender, Winston, & Miller, 1984; Frost, 1993; Gordon, 1994; Habley, 1982; Habley, 2003; Heisserer & Parette, 2002; Knight, 2000; Lopez, Yanez, Clayton & Thompson, 1988; Metzner, 1989; Saunders & Ervin, 1984; Tuttle, 2000; Winston & Sandor, 1984). Hameister (1989) suggested that satisfaction and retention of students with disabilities are directly impacted by the ability of academic advisors and other institutional representatives to (a) encourage independence, (b) promote mainstreaming, (c) request student input in service development, (d) recognize and celebrate individuality, (e) provide honest performance evaluations, (f) encourage campus-wide participation in meeting student needs, and (g) develop targeted retention strategies. "When students feel that the institution will be responsive, they will reveal their needs, make valuable suggestions, and put forth great effort" (Hameister, 1989, p. 350).

Teaching

When students share the responsibility for their own advisement, they learn how to explore their options, ask questions, search for answers, and make decisions. If

students are learning through the advisement process, are advisors also teaching? Crookston (1972) asserted that the answer to this question is affirmative when he defined teaching as any activity that contributes to the growth of an individual or group and that can be evaluated. Kramer (2003), expounding on Crookston's ideas, suggested that effective advising and teaching share nine fundamental principles including: (a) establishing connections with students, (b) engaging students in their own learning, (c) collaborating with others to ensure use of all available resources, (d) helping students assign personal meaning to their academic goals, (e) helping students connect their personal and academic interests, (f) motivating and encouraging students to make decisions, (g) giving, taking, and sharing responsibility with students, (h) promoting student growth and development, and (i) assessing, evaluating, and tracking student progress. Advisement, as a process of individualized teaching, contributes to the development of students' rational processes, problem-solving and decision-making skills and typically provides students with first-hand opportunities to practice these (Crookston, 1972; Frost, 1991; Grites & Gordon, 2000; Lopez et al., 1988; Moore, 1976; Noel, 1976; Ramos, 1997; Wilder, 1981). Fundamentally, developmental academic advisement provides an opportunity to teach students how to find individual purpose and meaning in their postsecondary educational experiences (Ender et al., 1984). For students with disabilities, advisement also facilitates independence and provides the encouragement necessary for self-advocacy within the higher education system (Ramos, 1997). By contributing to student development, advisement helps prepare students for life.

Achieving an appropriate balance of challenge and support is essential for student development, retention, and success (Jordan, 2000). Student development relies on the personal satisfaction attained when the student decides to take a risk and succeeds (Trombley & Holmes, 1981). Academic advisors contribute to students' continued development by helping them set realistic goals which will present challenges, yet provide opportunities for future successes. With each success, students receive further motivation to remain enrolled and continue their degree progression. In the face of excessive challenges, students may become overwhelmed and feel they have no other option but to quit. If provided with too much support, students may become complacent and fail to develop the skills necessary not only for success in the classroom, but in life as well.

Noel (1976) posited that the teaching that occurs through the advisement process, whether directly or indirectly, not only helps students maximize their potential, but also to explore and determine how they want to live their lives. Jordan (2000) offered a comparison between academic advisors and book editors or co-editors because they assist students in creating their life stories through the exploration of positive alternatives to potentially negative aspects of their lives. Ender, Winston and Miller (1982) suggested that developmental advisors' recognition of the unique perspective of, and concern for, each student enhances opportunities to assist students in achieving their goals. Further, Gordon (1988) described developmental advisement as the most likely means of successfully providing personalized education to students in higher education. By helping students learn new ways of thinking, meeting educational and personal goals, and

applying new skills in diverse environments, advisors are not only contributing to their academic success, but to their preparedness for assuming roles as productive, active members of society (Drake, 2011; Metzner, 1989; White & Schulenberg, 2012).

Teaching, as a function of advisement, contributes to increased student learning and development, and consequently, contributes to increased student involvement (Astin, 1984; Hall & Belch, 2000). As students develop positive personal relationships with their academic advisors, they tend to become more involved and invested in the academic aspects of their own education (Ender, 1994; Tinto, 1987; Tinto, 1975). Typically, as student involvement increases, so too, does social connectedness within the campus community, and ultimately, the likelihood of retention and success. (Tinto, 1975, 1987).

Connectedness

In addition to contributing to the growth and development of students, advisement may also aid in the establishment of a good fit between students and institutions. A crucial element in student persistence and retention is how well students believe they fit into their higher educational community (Astin, 1971; Berdie, 1967; Feldeman & Newcomb, 1970; Noel, 1976; Trombley & Holmes, 1981). Collectively, interactions with faculty, staff, and other students, and experiences in classrooms, residence halls, and other social settings on the college campus, impact students' feelings of connectedness to their institutions (Lechtenberger et al., 2012). Connectedness to the college environment is particularly important for students in underrepresented groups, such as students with disabilities, who have often felt unwelcome and inconsequential in the higher education environment (Hall & Belch, 2000; Jones, 1996; Wilder, 1981). Mamiseishvili and Koch

(2010) reported that students with disabilities who do not participate in academic or social activities outside of class, and therefore are less connected to the campus community, are less likely to remain enrolled in college after their freshman year. Academic advisement provides an opportunity for advisors of students with disabilities to demonstrate empathy, attempt to view the college environment from the students' vantage point, and understand students' apprehensions, thereby reducing the focus on the disabilities of these students, and thus, creating a more welcoming, secure environment in which authentic connections may develop (Ramos, 1997).

When students feel isolated, bored, incompatible with, and irrelevant to, their collegiate community, they are more likely to be dissatisfied with their educational environment, and thus, are more likely to ultimately drop out without finishing their degree (Lechtenberger et al., 2012; Noel, 1976; Quick et al., 2003). As a result of their personal and continued interactions with students, advisors may be the only institutional representatives capable of creating meaningful connections. Development of these personal connections with students with disabilities may be profoundly impacted by advisors' actions during the advisement process. Ramos (1997) suggested that advisors strengthen the probability of developing connections with students with disabilities by employing the following general strategies: (a) ask before acting, (b) make eye contact, (c) do not avoid using common phrases that contain verbs identifying the students' limitations (e.g. walk with me), and (d) treat these students as adults and with respect. Academic advisement, when approached from a student-centered, rather than disability-centered perspective, may reduce students' feelings of dissonance by providing a

personal connection to an institutional representative who demonstrates caring and concern.

In a report of findings from a 1987 study conducted to identify students' academic advisement preferences and priorities, Fielstein (1989) revealed that 83.3% of students believed advisors should be personally acquainted with the students they advise, rather than simply identifying them by some personal identifier, such as a student identification number. Further, over 53.4% of the students participating in the study indicated that advisors should be aware of each student's background, thereby enabling them to become more knowledgeable of each student's unique needs. Moreover, 98.9% of students believed it was a priority for advisors to help them plan a course of study and to be accessible by keeping regular office hours. The results of Fielstein's study suggest that students prefer the developmental approach to advisement, through which the unique needs of each student are most likely to be met.

Ineffective academic advisement has been identified as a major barrier to student retention in higher education (Beal & Noel, 1980). Though extant literature has established the relationship between academic advisement and academic success of all students, including those with disabilities, limited research exists regarding advisors' knowledge of, and attitudes toward, the specific needs of students with disabilities. This limited awareness may prevent advisors from focusing on and addressing the concerns, needs, and personal, educational, and career aspirations of these students, all of which contribute to their overall personal development (Altman, 1981; Gordon, 1994).

Advisors' minimal understanding of students' specific disability-related needs may also restrict the interactions through which students learn to solve problems, make decisions, evaluate their personal situations, and, generally, become more critically aware of themselves and their life goals (Crookston, 1972). Ultimately, advisor practices that demonstrate a lack of familiarity with the specific needs of students with disabilities may inhibit student development and learning, thereby reducing their potential for academic success.

Identifying Student Needs

Academic advisors must function within the parameters established for their positions by their respective institutions; however, the expectation exists that, at minimum, all advisors will provide guidance concerning general education requirements and assist students in reviewing and scheduling appropriate courses that adhere to their academic degree plans (Tuttle, 2000). Institutional efforts to bolster student retention and degree completion require the implementation of more individualized, student-centered approaches in student support services. Advisors, in collaboration with other institutional representatives, are tasked with identifying those barriers that impede student success (Snyder, 2005). Though all college students experience similar challenges, students with disabilities encounter additional obstacles that often directly result from their disabilities. These additional complications vary by, and contribute to specific needs for, each student.

Saunders and Ervin (1984) indicated that the diversity of students in higher education renders a narrow approach to academic advisement impractical for meeting the

needs of all students. Since one size does not fit all in academic advisement, no particular advisement practice best meets the needs of all students. Advisors who utilize a developmental approach recognize that differences between students exist as a result of individual, not stereotypical, circumstances and tailor their advisement practices to engage and encourage students based on their specific individual needs (Frost, 1991), thus fulfilling a fundamental requirement of the ADA (Franklin, 1997).

Identifying the needs of student with disabilities does not significantly differ from assessing the needs of any other students. Each student in higher education is accompanied by his or her individual background, personality, abilities, and limitations. Collectively, these factors define those needs specific to each individual. Franklin (1997) asserted that advisors, in compliance with ADA requirements, are responsible for assessing educational needs specific to the individual and ensuring that students with disabilities receive reasonable and appropriate accommodations, which create an environment in which their chances of success are equal to that of their peers without disabilities. Advisors need to exercise caution to ensure that they do not allow their own ideas of specific disability limitations or deficiencies to influence their assessment of the needs or capabilities of students with disabilities (Franklin, 1997). Rather than working with students to determine how they will succeed despite the challenges they face, these preconceived notions may center the advising focus on what the student cannot or will not be able to accomplish (Franklin, 1997). Because advisors are expected to demonstrate confidence and sensitivity when identifying and responding to the specific needs of students with disabilities, it is crucial that they understand, acknowledge, and

overcome their personal preconceptions in order to fulfill their responsibilities (Baker et al., 2012; Houck et al., 1992; Vowell & Farren, 2003).

Challenges to Effective Advisement

Advisement serves as a frontline defense against student attrition, particularly when advisors develop authentic personal relationships with their students and provide individualized support and guidance. Extant literature has established that academic advisors in higher education are instrumental in contributing to the academic success of all students. However, myriad challenges may disrupt the implementation of effective advisement practices, thereby reducing the positive impact of the support services provided by these individuals. McLaughlin (1995) asserted that it is particularly important for advisors to recognize and avoid illegal advisement practices, such as restricting a student's academic program selection or directly inquiring about his or her disability status (McLaughlin, 1995). O'Brien and Wright-Tatum (1997) contended that advisors are challenged by the need to provide realistic advisement without violating the equal opportunity mandates of Section 504, ADA, and ADAAA. Specifically, these mandates require advisors to avoid judging the appropriateness of, and steering students away from, any academic major based on the nature of their disabilities, thereby denying them the opportunity to participate because of those disabilities (O'Brien & Wright-Tatum, 1997).

Faculty attitudes toward advisement may prove challenging, particularly for those who view advisement as a burden while others enjoy the opportunity to interact with students individually (Wallace, 2013). Regardless of their personal feelings about

advisement, faculty are likely to encounter numerous challenges to their efforts to develop relationships with and provide guidance to students in higher education. Major obstacles that preclude advisors from effectively meeting the needs of students include: (a) limited faculty knowledge, (b) technological advancements that depersonalize the collegiate environment (Ender, 1994), (c) lack of institutional commitment to advisement, (d) increased expectations and responsibilities for faculty, and (e) increased hiring of part-time adjunct faculty.

Limited Faculty Knowledge

Trombley and Holmes (1981) suggested that many faculty lack the knowledge and skills necessary to effectively provide developmental advisement to students. In addition to requisite knowledge of institutional policies and academic programs (Tuttle, 2000), advisors who provide guidance for students with disabilities must also possess knowledge of disability legislation, barriers, accommodation requirements, and specific student needs (Hall & Belch, 2000; Humphrey, Woods, & Huglin, 2011; Mellblom & Hart, 1997; Nutter & Ringgenberg, 1993; Vasek, 2005). Research findings reported by Thompson, Bethea, and Turner (1997) and Dona and Edmister (2001) suggested that faculty often possess limited knowledge of the specific requirements of reasonable accommodations and how to provide these in accessible formats. Moreover, Vasek (2005) reported that many faculty self-disclose limited knowledge of disability-related issues. Faculty and staff in higher education have demonstrated a need to improve their personal knowledge of disability-related issues and the specific needs of students with disabilities in higher education (Park, Roberts, & Stodden, 2012; Rao,

2004). These faculty are often interested in increasing their knowledge and developing the skills necessary to effectively meet the needs of students with disabilities (Vogel, Leyser, Burgstahler, Sligar, & Zecker, 2006).

Knowledge of requirements for provision of reasonable accommodations may influence advisor's commitments to, and referrals for, students with disabilities. Specifically, advisors benefit from an understanding that reasonable accommodations should not create unfair advantages, significantly alter existing academic programs, lower academic standards, or cause unnecessary financial hardships to the institution. Enright et al. (1996) asserted that effective advisement for students with disabilities requires knowledge of the impact of disability on development. Moreover, advisement practices may be enhanced when advisors possess a basic knowledge of the various types of disabilities that may affect students in higher education, documentation guidelines, and available institutional resources.

Historically, faculty have been expected to acknowledge and accept the use of accommodations by students with disabilities, however, they are now expected to possess a broader, more comprehensive knowledge of disability-related issues (Brinckerhoff et al., 2002). Typically, raising disability awareness among faculty advisors has focused primarily on ensuring adherence to legal mandates (Scott & Gregg, 2000). However, the established link between retention and success of students with disabilities and more individualized attention, has prompted the focus of faculty training to shift to identifying how to best meet the needs of these students (Shaw & Scott, 2003). According to Mellblom and Hart (1997), faculty who participate in trainings designed to enhance

knowledge of institutional disability support services, identify and define the most prevalent disabilities on campus, and describe the most commonly used accommodations gain valuable insight that is beneficial in meeting the advisement needs of students with disabilities. Scott and Gregg (2000) suggested that to meet the needs of students with disabilities, faculty need to enhance their knowledge in only three areas: (a) readiness to make accommodations, (b) ability to make appropriate accommodations, and (c) acknowledge and understand that institutional disability support services will provide assistance.

Ender (1994) posed that effective advisement for all students requires specific communication and relationship building skills that may not be inherent to most advisors, but could be learned through appropriate training. However, advisors, who may recognize areas in which they need improvement often have little influence in the development of faculty training topics (Ender, 1994).

Generally, both internal and external training opportunities for advisors are limited (Wallace, 2013). Advisor training, according to Habley and Morales (1998), has become more narrowly focused in scope with less emphasis on the development of advisement and relationship skills that enhance opportunities for meeting the specific needs of students. Habley (2003) reported that most faculty-advisor training occurs as a single, one-day workshop offered only once during a calendar year and that only 25% of American colleges and universities require faculty participation.

Often, faculty advisors are exempt from mandatory trainings concerning students with disabilities that could potentially enhance their advisement practices (Snyder, 2005;

Wallace, 2013). Generally, these faculty receive written correspondence detailing any new policies or procedures to which they should adhere, but do not necessarily gain an understanding of their role in meeting the needs of students with disabilities. Further, unlike faculty in public K-12 education, collegiate faculty and advisors are not required to participate in the development of an Individual Education Plan (IEP) for each student with disabilities. Therefore, their exposure to various types of disabilities and disability-related issues may be limited. Faculty who participate in disability-centered training are more likely to have positive attitudes regarding students with disabilities in higher education (Murray, Lombardi, Wren, & Keys, 2009) and are more willing to offer and use appropriate accommodations (Bigaj, Shaw, & McGuire, 1999).

Technology

Technological advancements provide platforms for increasing educational opportunities, reducing resource consumption, and enhancing data management, storage, and retrieval. Because of advances in technology, students may pursue, and earn, a college degree without ever being physically present on a college campus. While innovations in technology increase convenience and institutional competitiveness in a globalized society, they also depersonalize the educational experience (Ender, 1994). Students are far less likely to develop connections to an institution if they are not physically present on campus or if they do not have face-to-face interactions with institutional representatives, including advisors. Technology, therefore, impedes the development of authentic personal relationships between students and advisors which are the cornerstone of effective advisement. The depersonalization resulting from

technological innovations may prove detrimental to students, including those with disabilities, whose academic success is linked to a supportive, encouraging educational environment.

Institutional Commitment

Increasing student retention and graduation rates are primary goals of most institutions of higher education. In response to the needs of current and incoming students, many institutions offer various programs and support services which are systematically evaluated and updated. Though academic advisement has been identified as a major factor contributing to student success (Andrews et al., 1987; Bachus, 1989; Crockett, 1979; Ender, 1994; Frost, 1993; Gordon, 1994; Habley, 1982; Heisserer & Parette, 2002; Knight, 2000; Saunders & Ervin, 1984; Tuttle, 2000; Winston & Sandor, 1984), few institutions have implemented specific campus-wide advisement practices. Many institutional administrators advocate improved advisement practices on their campuses, however they fail to champion the cause, thereby supporting the status quo in advising (Ender, 1994; Trombley & Holmes, 1981). Hunter and White (2004) declared that academic advisement cannot reach its full potential to enhance the collegiate experience of all students until all members of the institutional community embrace this support service as an essential, rather than marginal, component of higher education. In the absence of institutional commitment to advisement practices that surpass course scheduling and selection, faculty will not be rewarded for their own commitment to advising.

Increased Faculty Responsibilities

Expectations of collegiate faculty typically include teaching, securing external funding for and conducting and publishing research, performing service activities, and providing student advisement. Wallace (2013) reported findings from the 2011 NACADA National Survey indicating that, on average, faculty provide advisement to 25 students. However, based on the number of students and faculty within a department, it is not unusual for individual faculty to be assigned more than 30 students for advisement (Ender, 1994). Wilder (1981) suggested that the large advisee to advisor ratio hinders effective advisement and consequently, may negatively impact student success. Considering their other responsibilities, which customarily weigh more heavily in tenure decisions, effectively advising and contributing to the development of this many students may be unrealistic.

Advisors, particularly those for whom academic advisement is a part-time activity performed in fulfillment of full-time job responsibilities, may favor a single approach that maximizes the number of students advised in a minimum amount of time. While this single approach may fulfill obligations to assist students with course scheduling and degree planning, it may prove ineffective for meeting the specific needs of students or contributing to their overall development. Saunders and Ervin (1984) suggested that advisors, despite heavy workloads and limited time, may find that the integration of flexibility into their advisement practice enhances opportunities for meeting student needs, thus increasing the likelihood of student retention and success. This flexibility, particularly the adoption of individualized approaches to advisement, while beneficial to

students, may prove challenging for advisors due to increased time and commitment obligations.

Increased Hiring of Part-time Faculty

In the face of budgetary constraints, many institutions of higher education have increasingly turned to part-time faculty to fill vacancies and respond to shifting student demands (Christensen, 2008; Walsh, 2002). From 1975-2011, the number of part-time faculty appointments in higher education increased over 300 percent (Curtis & Thornton, 2013). The Coalition on the Academic Workforce (2012) reported that at 49.2% part-time faculty represent the largest and most rapidly increasing subgroup of the instructional workforce in higher education. Nationally, part-time faculty are paid between $1,800 and $5,225 per course and those who teach the equivalent of a full course load earn less than one-third of the annual salary of full-time faculty (Curtis & Thornton, 2013). Generally, part-time faculty do not receive benefits packages, thereby reducing institutional costs.

To maintain accreditation, institutions of higher education must maintain a careful balance between the numbers of full- and part-time instructional faculty employed by each academic department. Working within the parameters of accreditation requirements, institutional officials recognize that cost savings from the employment of part-time faculty allow funding to be allocated to potentially more pressing needs. However, part-time faculty rarely have the opportunity to develop long-term relationships with full-time senior faculty or students, thus reducing their connectedness to the institution (Ender, 1994). Since part-time faculty seldom become integrated into the

institutional culture, they are unlikely to become knowledgeable of institutional policies, programs, and resources.

CHAPTER III

METHODOLOGY

Overview

This chapter provides a description of the methodology used during this study. Specifically, the purpose of the study, description of the subjects, data collection process, description of data collection instruments, and data analysis are discussed.

A mixed methods design, which involves the collection, analysis, and *mixing* of both qualitative and quantitative data during a single research study, was used to create a better, more complete understanding (Creswell & Clark, 2007). In the examination of advisement practices concerning students with disabilities, the qualitative or quantitative methods, individually, may have been insufficient for effectively capturing related trends or details. Collectively, however, these complementary methods provided increased opportunities for more complete analysis (Green, Caracelli, & Graham, 1989; Tashakkori & Teddlie, 2009).

This study employed the sequential exploratory strategy, a mixed methods design widely used in educational research that consists of two distinct phases (Creswell, 2009). In the first phase, qualitative data was collected through personal interviews to provide a greater understanding of the real-world experiences of advisors in providing advisement to students with disabilities in higher education. Qualitative responses obtained during the first phase informed the construction of a quantitative instrument, which was administered as a web-based survey during the subsequent second phase.

Purpose

The purpose of this study was to explore advisors' knowledge of disabilities, disability law, and accommodation requirements and to examine whether type of advisor (full-time or part-time), type of educational institution, and type of advisement practice were significantly associated with advisement practices. The following research questions served to guide this research:

1. What are the practices of academic advisors related to students with disabilities?
2. How do academic advisors' practices reflect their knowledge of the specific needs of students with disabilities?
3. How do academic advisement practices reflect advisors' knowledge of disability law and accommodation requirements?
4. How does an advisor's knowledge of institutional disability support services influence his or her advisement of student with disabilities?
5. Are advisement practices related to students with disabilities independent of an advisor's full- or part-time status?
6. Are advisement practices related to students with disabilities independent of advisement type?
7. Are advisement practices related to students with disabilities independent of the type of institution (two-year, four-year, public, or private) in which the advisor is employed?

Participants

The target population for this study was full-time and part-time academic advisors currently employed by two- and four-year public and private institutions of higher education geographically dispersed across the United States. Selection criteria for participation in the study included (1) full- or part-time employment at an American institution of higher education and (2) job responsibilities that include undergraduate student advisement.

For the qualitative phase of the study, purposeful sampling was used. The purposeful sample allowed the identification and intentional selection of specific individuals based upon their ability to provide informative responses to the research questions (McMillan & Schumacker, 2001; Patton, 2002). During the qualitative phase, two additional selection criteria for participation in the study were added: (1) personal experience providing advisement to students with disabilities and (2) at least three years of academic advisement experience. The three-year experience criterion was added to include advisors who, because of the amount of time spent advising, had been afforded the opportunity to evaluate and, as a result, modify their advisement practices. The study participants were selected based upon their roles as academic advisors for undergraduate students, and their experience with advising undergraduate students who have disabilities. Due to the researcher's personal preference for face-to-face interviews, advisors employed by institutions of higher education in Alabama, Mississippi, Louisiana, and Tennessee who provided academic advisement to students, and had experience advising

students with disabilities were recruited for participation in personal interviews during the first phase, qualitative, of this study. Interviews were conducted with 12 participants.

For the purpose of the quantitative phase of the study, a convenience sample was used. Convenience sampling allowed the selection of individuals who were easily accessible and willing to participate. During the second phase of the study, quantitative, advisors employed by institutions geographically dispersed across the United States were informed of, and asked to participate in, a web-based survey. An email invitation (Appendix H) explaining the purpose of the research, specifying selection criteria, providing instructions for accessing the online questionnaire, and requesting advisor participation was sent to two National Academic Advising Association (NACADA) listservs, 20 state academic advising associations, as well as disability services offices or advising centers at 300 institutions of higher education across the United States. Disability services or advising centers at two public four-year, two private four-year, and two public two-year institutions from each of the 50 states received invitations to participate in the survey. A request from the researcher asking that the information be forwarded to association members and institutional personnel who meet the selection criteria was also included in the email. Follow-up emails and telephone calls to the advising associations and centers were used to provide clarification and to serve as reminders of the purpose of the study.

Instrumentation

Two researcher-developed instruments, specific to either the qualitative or quantitative phase of the study, were used for data collection. A description of each instrument follows.

Phase I-Qualitative

The first phase of the study focused on characterizing academic advisement practices related to students with disabilities in institutions of higher education. The primary data collection technique consisted of semi-structured personal interviews with 12 academic advisors from institutions of higher education in Alabama, Louisiana, Mississippi, and Tennessee.

The *Postsecondary Advisement Practices for Students with Disabilities Interview Guide* (Appendix A) included 17 open-ended questions that were pilot tested with three faculty members who met the aforementioned selection criteria of at least three years of academic advisement experience and experience providing academic advisement to undergraduate students with disabilities. The questions included in the Interview Guide focused on five main concepts (1) advisor definition of disability, (2) advisor identified advisement needs specific to students with disabilities, (3) experience-based changes to advisement practices, (4) preparation or training for advising students with disabilities, and (5) knowledge of institutional resources for students with disabilities. The qualitative data were analyzed in order to inform questionnaire design in Phase II.

Phase II-Quantitative

The second phase of the study focused on identifying academic advisors' knowledge of disabilities, disability law, and accommodation requirements by exploring their advisement practices. A cross-sectional survey design, which collects data at one point in time, was used. The primary quantitative data collection technique was a web-based survey created using Qualtrics (2013) that employed the researcher-developed *Academic Advisement for Students with Disabilities Advisor Questionnaire* (Appendix B) which contained 41 multiple-choice items. The questionnaire was informed by the qualitative data collected in Phase I. A panel of five higher education faculty who provide advisement for undergraduate students and have experience advising students with disabilities participated in a pilot test of the survey instrument to validate its content. The *Academic Advisement for Students with Disabilities Advisor Questionnaire* (Appendix B) was organized into five sections: (1) advising role, (2) advisor training, (3) institutional description, (4) demographics, and (5) advisement scenarios.

Six advisement scenarios representing potential real-world advising encounters with students with disabilities were scripted (Appendix C) and presented as video vignettes (Appendix D) in this web-based questionnaire. The video vignettes were filmed in a conference room staged to resemble the office of a postsecondary academic advisor. Five of the six students featured in the advisement scenarios were portrayed by current college students. These advisement scenarios featured (1) a student with accommodations for a learning disability who was interested in studying abroad, (2) an international student who disclosed having dyslexia, (3) a student struggling in algebra

who revealed experiencing math difficulties throughout high school, (4) a student who was struggling with writing but did not disclose a disability, (5) a student in a wheelchair attending a preview session who planned to major in chemistry, and (6) a student with a visual impairment who wanted to change to a computer programming major.

In order to reduce the potential for respondent bias, four versions of each of these scenarios were created and recorded. Each version of each scenario involved one student and one advisor. For each scenario, the student was held constant through all four versions, while the advisor was varied by race and gender. Specifically, each scenario was video recorded with the featured student and an African American female, African American male, Caucasian female, and Caucasian male advisor.

The randomization feature available for this web-based survey was used to randomly reveal one of the four versions of each advising scenario for participant viewing. For each scenario, the participant was asked to watch the scripted advising encounter between a specific student and either an African American female, African American male, Caucasian female, or Caucasian male advisor. Each student was featured in only one scenario and, therefore, was seen only once by each participant. Because there were six advising scenarios and only four advisors, participants were expected to see some of the advisors more than once, however, the randomization introduced the chance that an advisor of a different race or gender would be seen for each scenario. After viewing each video, participants were presented with a set of questions and asked to select the answer choice that most closely represented their probable response in a similar situation.

The survey questionnaire was web-based in Qualtrics (2013) and accessible through a specific URL provided to all potential participants. Use of a web-based survey allowed automatic storage of participant responses in one database which facilitated and simplified their transferral to SPSS for analysis. The opening page of the web-based survey contained an informed consent form (Appendix E). Participants consented to participate in the survey in order to gain access to the questionnaire.

A pilot test of the questionnaire was conducted to validate the instrument and test its reliability. Based on results from the pilot tests, items in the questionnaire were revised.

Data Collection

Data collection for this study occurred in two phases, the first of which focused on gathering qualitative information concerning academic advisement for students with disabilities. The latter phase was dedicated to capturing related quantitative information. This study employed an emergent design, which allowed adjustments in the research process based on information obtained through data collection and analysis (Creswell, 2009). Information obtained during the first, qualitative phase of data collection and analysis informed the research and prompted changes in the subsequent, quantitative data collection phase. Use of an emergent design allowed the researcher to learn about current advisement practices related to students with disabilities in higher education and focus the research on obtaining information related to this topic.

Phase I-Qualitative

Phase I data collection occurred from July 2013 through August 2013.

Potential participants were contacted via email and asked to consider participating in the qualitative phase of this study. This email invitation to participate in the qualitative phase of the study (Appendix F) informed the potential participants of the researcher's background, significance of the research, as well as the purpose of, and benefits of participation in, the study. An electronic copy of an informed consent form (Appendix G) was attached to the email sent to each potential participant.

The researcher originally planned to send follow-up emails and make personal telephone calls one week following the initial email to encourage participation. These follow-up measures proved unnecessary as 12 advisors confirmed their willingness to participate in the study within two days of initial contact. Those individuals who affirmed their interest in participating in the study were contacted via telephone to schedule an interview. A confirmation email of the interview time and date was sent to each participant.

Prior to each interview, the researcher verbally reemphasized to the participant, the importance of informed consent. Further, the researcher reminded the interviewees that participation was voluntary and that at any time during the interview consent could be withdrawn and participation discontinued. Additionally, each participant was reminded of the measures in place to protect his or her confidentiality and anonymity. Prior to beginning each interview, the researcher asked the participant to sign a copy of the informed consent form. The researcher also requested each participant's permission to audio record the interview for the purposes of creating a transcript which was used in data analysis.

The personal interviews were semi-structured in nature. Semi-structured interviews are formal discussions during which the interviewer directs the conversation by posing open-ended questions to the respondent (Creswell, 2007). Generally, the questions asked during a semi-structured interview are included in an interview guide and follow a sequential order. The format of semi-structured interviews allows respondents to introduce new topics during their responses to open-ended questions, and provides the researcher with freedom to deviate from the interview guide and explore these new topics as they arise (Creswell, 2007). The personal interviews in this study consisted of questions from the *Postsecondary Advisement Practices for Students with Disabilities Interview Guide* (Appendix A) which explored academic advisement practices as they relate to disability laws and the specific needs of students with disabilities. Each interview took approximately 45 minutes to complete.

Phase II-Quantitative

Phase II data collection occurred August 2013-September 2013. Qualtrics (2013) was used to create the web-based questionnaire that was employed. Upon completion of the questionnaire development, a pilot test was conducted to identify necessary revisions. Following revisions to the instrument, data collection commenced. An email invitation to participate in the survey (Appendix H) explaining the researcher's background, significance of the research, purpose of, and benefits of participation in, the study and the specific URL for the survey questionnaire was emailed to two National Academic Advising Association (NACADA) listservs, 20 state academic advising associations, and disability services and student support offices at 300 institutions of higher education

across the United States. The email requested that the information be shared with organizational members and institutional faculty and indicated the specific dates of data collection. Further, the email requested that those potential participants who received the information forward it to other academic advisors in higher education who might be interested in participating in the study.

Participants who accessed the specific URL for the survey questionnaire found an informed consent form as the opening page. The informed consent provided a reminder that participation was voluntary, and, therefore, consent could be withdrawn and participation discontinued at any time. Further, participants were informed of the measures in place to protect confidentiality and anonymity. In order to gain access to and complete the questionnaire, participants were required to indicate their agreement to participate in the study. The questionnaire contained items that explored advisor experiences, roles, training, demographics, and knowledge of disability law and the needs of students with disabilities. Completion of the questionnaire was estimated to take approximately 10 minutes. Participants who completed the web-based survey were provided with an option to download and view an answer key (Appendix I) that revealed responses for each advising scenario that appropriately complied with disability law and accommodation requirements.

The web-based questionnaire was available for a two week period. One week following the initial email providing information about the survey, a follow-up email encouraging participation was sent. Both emails emphasized the importance of participants' input for the study.

Data Analysis

This study's incorporation of two different and distinct phases of data collection necessitated two phases of data analysis. Analysis in each phase was dictated by the nature of the data collected.

Phase I-Qualitative

During qualitative analysis, data may be collected and analyzed simultaneously (Merriam, 1998). Since all participants granted permission for audio recording, a transcript of each interview was created. Each transcript was coded and analyzed for themes. Qualitative analysis, according to Creswell (2012), includes five major steps: (1) exploring data by reading through transcripts and writing memos, (2) coding data and labeling text, (3) developing themes by similar codes, (4) connecting themes, and (5) developing a narrative. The qualitative analysis provided insight into the characteristics of academic advisement practices for students with disabilities and provided clarification for items proposed for use in the second, qualitative data collection phase.

Phase II-Quantitative

Quantitative data were analyzed using SPSS version 20.0. Prior to analysis, the data were screened for missing and outlying values. Frequency analysis was performed to determine valid response percentages for all items included in the questionnaire. The appropriate statistical tests and analyses used in this study were predetermined by the following three research questions: (1) Are advisement practices related to students with disabilities independent of an advisor's status as full- or part-time? (2) Are advisement

practices related to students with disabilities independent of disability type? (3) Are advisement practices related to students with disabilities independent of the type of institution (two-year, four-year, public or private) for which the advisor is employed? Due to the categorical nature of the answer choices for questionnaire items corresponding to these research questions, the Chi-square test of independence was used for statistical analysis. The goal of the Chi-square test of independence was to determine if advisement practices were independent of advisor, disability, or institution type.

Ethical Considerations and Research Permission

In compliance with the regulations of the Institutional Review Board (IRB) at The University of Southern Mississippi (USM), an application was completed and submitted for review. Approval (Appendix J) to conduct this research was obtained prior to commencement of the study.

An informed consent form was developed for each phase of this study. Each form explained the participants' rights, risks associated with participation, and confidentiality expectations. Interview participants were asked to sign a consent form indicating their voluntary agreement to participate in the study. Participants in the quantitative phase of the study were asked to indicate their agreement to participate in the research by clicking on the "I agree" button at the end of the consent form on the opening page of the questionnaire.

Anonymity of participants was protected by using numbers to identify interview participants and using a web-based questionnaire that requested no personal identifiers. Participants were informed that only group information, with no personal information,

would be presented in reports or publications. All study data, including SPSS data and output files, digital audio recordings, and transcripts were kept in a locked filed cabinet in the home office of the researcher until transcription and analysis were completed. Upon completion of data analysis and results reporting, all electronic files, digital recordings and transcripts were destroyed.

CHAPTER IV

ANALYSIS OF DATA

Overview

This chapter presents the results of data analysis for a study that employed an exploratory sequential mixed methods design as described by Creswell (2009). Use of the exploratory sequential design allowed qualitative data, which was collected during the first phase of the study, to inform the development of the instrument used for data collection in the second, quantitative phase. Qualitative data were collected over a two-week period from July-August 2013 and quantitative data were collected over a two-week period from August-September 2013. Prior to data collection, the *Postsecondary Advisement Practices for Students with Disabilities Interview Guide* (Appendix A) was pilot-tested to establish appropriateness of instrument language, level of clarity, and ease of comprehension. Further, the *Academic Advisement for Students with Disabilities Advisor Questionnaire* (Appendix B) was pilot-tested for readability and to determine the validity of the instrument in the measurement of the characteristics of postsecondary academic advisement practices related to students with disabilities and appropriateness of its use with postsecondary academic advisors. Following pilot-testing, minor revisions were made to both instruments to improve data collection. The discussion of the findings from this study includes a review of the descriptive analyses as well as analyses of the research questions and hypotheses.

Qualitative Data Analysis

Interviews were conducted with 12 postsecondary academic advisors at 11 institutions of higher education in Alabama, Louisiana, Mississippi, and Tennessee. All interviews were conducted in the respective office of each study participant. Digital recorders were used to create audio recordings of the interviews. The researcher created transcripts of each interview to accompany written notes from each discussion. Transcripts were coded and analyzed for themes related to characteristics of academic advising practices for students with disabilities.

Description of Sample

The qualitative phase of this study was designed to provide an increased understanding of the characteristics of academic advisement practices related to undergraduate students with disabilities. Institutions of higher education have provided advisement to their undergraduate students through faculty, for whom advising is one of several job responsibilities, or professional advising staff, for whom advising is the primary function. As such, the following criteria were used when recruiting participants for the qualitative phase of this study: (1) the participants were full-time or part-time employees at an institution of higher education in Alabama, Mississippi, Louisiana, or Tennessee; (2) the participants' job responsibilities included providing academic advisement to undergraduate students; (3) the participants had at least three years experience providing academic advisement; and (4) the participants had experience providing academic advisement to students with disabilities. Twelve individuals, all of whom met the aforementioned criteria and responded positively to an email invitation to

participate in this study, were selected for interviews. Table 2 presents demographic characteristics of these participants including gender, race, and type and location of employing institution. General characteristics of participants' academic advisement experiences, including years of experience, percentage of work time spent advising, number of advisees, percentage of advisees with disabilities, and most commonly encountered disability type are presented in Table 3.

Table 2

Demographic Characteristics of Interview Participants

	Gender	Race	Institution Type	Institution Location (State)
Advisor 1	Female	Caucasian	Four-Year, Public	Mississippi
Advisor 2	Female	Caucasian	Four-Year, Public	Mississippi
Advisor 3	Female	Caucasian	Four-Year, Private	Mississippi
Advisor 4	Female	African American	Four-Year, Public	Mississippi
Advisor 5	Male	Caucasian	Four-Year, Private	Mississippi
Advisor 6	Male	Caucasian	Two-Year, Public	Louisiana
Advisor 7	Female	African American	Two-Year, Public	Alabama
Advisor 8	Female	African American	Four-Year, Public	Tennessee
Advisor 9	Female	Caucasian	Four-Year, Public	Alabama
Advisor 10	Female	Caucasian	Four-Year, Public	Alabama
Advisor 11	Male	African American	Four-Year, Private	Tennessee
Advisor 12	Female	Caucasian	Four-Year, Private	Louisiana

Table 3

Characteristics of Advisement Experience

	Years Experience	Work time spent advising (%)	Students advised per semester	Advisees with disabilities (≈ %)	Commonly encountered disability type
Advisor 1	32	20	15	3	Learning
Advisor 2	15	20	25	5	Learning
Advisor 3	5	100	150	10	Learning
Advisor 4	17	15	20	5	Learning
Advisor 5	14	85	100	30	Visual
Advisor 6	10	10	20	5	Hearing
Advisor 7	13	50	100	15	Learning
Advisor 8	10	20	40	10	Learning
Advisor 9	`14	20	50	5	Physical
Advisor 10	15	25	60	4	Learning
Advisor 11	7	20	20	2	Learning
Advisor 12	6	10	12	4	Learning

Purpose of Qualitative Phase

Extant literature suggests that effective academic advisement positively influences student satisfaction, involvement, and retention, thereby increasing the likelihood of academic success for all students (Andrews et al., 1987; Frost, 1993; Gordon, 1994; Heisserer & Parette, 2002; Knight, 2000). In the increasingly diverse and ever changing higher education environment, the process of academic advisement must continually

evolve to meet the needs of both students and institutions (Jordan, 2000; Wallace, 2013). The purpose of the qualitative phase of this study was to characterize current academic advising practices related to students with disabilities. The following research questions provided guidance for this phase of the research:

1. What are the practices of academic advisors related to students with disabilities?
2. How do academic advisors' practices reflect their knowledge of the specific needs of students with disabilities?
3. How do academic advisement practices reflect advisors' knowledge of disability law and accommodation requirements?
4. How does an advisor's knowledge of institutional disability support services influence his or her advisement of students with disabilities?

Summary of Qualitative Results

During analysis of the interview recordings and transcripts, six major themes characterizing current academic advisement practices for students with disabilities at the postsecondary level emerged. Though distinct, each of these themes was encompassed by one dominant principle: effective academic advisement requires the development of personal relationships or connections between advisors and their students. Six major themes in academic advisement practices that emerged during this study were:

1. The primary function of academic advisement is to help students succeed.
2. Academic advisement should focus on empowering students with disabilities.
3. Advising students is comparable to putting a puzzle together.

4. Appreciating and respecting individuality is crucial for effective advisement.
5. Asking specific questions is essential to helping identify student needs.
6. Referrals to the disability support services office are vital for success.

Importance of Developing Relationships

Personal relationships between advisors and students are not mandatory for academic advisement. It is possible for advisors to provide students with essential information regarding degree requirements and academic programs without developing personal connections. All advisors participating in this phase of the study, however, described the development and maintenance of personal connections with their students as fundamental to the success of their advisement practices. Advisor 5 explained:

> Students are off in college. They need somebody to connect with. That's what the advisement process is about. It's more than about what classes are you going to take. They need to connect with somebody. They're away from home, away from Mom and Dad. They need somebody to connect with. They're only going to connect with you if they feel comfortable doing so.

For these individuals, the advisement process involved more than course selection and scheduling. Advisor 1 suggested that "you can't advise unless you make a real effort to get to know the students and remember the really important parts of themselves that they share with you." Generally, the advisors conveyed the notion that students should not be strangers who need to reintroduce themselves each time a meeting occurs. Advisor 3 explained that to develop relationships with students you "just need to listen and take the time to be there when they need you." These demonstrations of

attentiveness and concern may foster the development of a relationship in which the student feels secure and comfortable. Advisor 7 indicated that an effective advisor "cares about students and treats everyone as a whole person, not just a check off on a schedule."

In addition to recognizing the importance of developing relationships with students, ten of the advisors noted the value of treating students as partners in the advisement relationship. While the advisor bears the responsibility of providing students with appropriate information and resources to help them succeed in higher education, the responsibility for actually achieving success falls on the students. Advisor 5 explained, "They're my partners. I'm going to give them the tools, everything they need, but they've got to be the ones who use those tools and do what is required to graduate." Through their descriptions of their advisement practices, these advisors demonstrated an understanding that helping students succeed requires personal relationships and shared responsibilities.

In addition to providing students with access to information and resources, most of the advisors revealed that they helped students learn how to use these tools. Advisor 4 declared that "advising is teaching." As partners in the advising process, students are responsible for exploring the options available to them and making decisions they believe are most appropriate and beneficial. Advisors help students learn how to use available information and resources to ask questions and search for answers. Through an advisement partnership, students may develop critical-thinking, problem-solving, and decision-making skills and be afforded opportunities to practice these under the guidance

of a caring and concerned advisor (Crookston, 1972; Frost, 1991; Grites & Gordon, 2000; Lopez et al., 1988; Moore, 1976; Noel, 1976; Ramos, 1997; Wilder, 1981).

Theme One: The primary function of academic advisement is to help students succeed.

Each of the advisors participating in the qualitative phase of this study indicated that helping students succeed represents the primary, and most important, purpose of the academic advisement process. While describing her attitude toward academic advisement, Advisor 1 asked, "Why would you be here if you didn't hope you could help them in their academic career." Her sentiment echoed throughout the discussions with the other advisors. Each of the advisors indicated that they had chosen their careers based on a desire to positively impact the educational outcomes of students in higher education.

Additionally, the advisors suggested that because academic advisement provides the best opportunity to contribute to student success by providing access to essential information and resources, advisement is the most important aspect of their jobs. Advisor 4 explained, "I know that an advisor can make a huge difference in a student's life, can completely change the trajectory of what they're doing." All of the advisors who participated in this study recognize the potential influence they have on the lives of their students and strive to provide them with necessary information, connections to beneficial resources, and assistance in setting and working toward achieving their goals. Advisor 2 specified:

> If I want my students to be successful, and I do, it takes a lot more than me just walking into a classroom and delivering a lecture or having a discussion or

developing a research plan. It's about helping them develop that plan to be successful. That's what advising is all about.

Theme Two: Academic advisement should focus on empowering students.

In addition to the typical stressors associated with adjusting to college life and perceived disability-related stigma, students with disabilities also face the new challenge of coordinating their own accommodations (Barnard-Brak et al., 2009; Getzel, 2008; Getzel & Thoma, 2008; Gil, 2007; Madaus, 2005). Each of the advisors participating in this phase of the study recognized the challenges faced by students with disabilities, and endeavor to empower them through the advisement process. According to most of the advisors, empowering students with disabilities begins by providing them with the information necessary to make enlightened decisions. Advisor 1 shared, "there is always a way you can help somebody through a difficulty, help them empower themselves by learning the requirements, rules, and resources." Providing timely and appropriate guidance regarding scheduling, program requirements, deadlines, accommodation requests, and available institutional support services allows advisors to address uncertainties and fears among students with disabilities, thereby enabling these students to play an active role in solving their own problems and making their own decisions. Empowerment of students with disabilities may also be contributed to the creation of an encouraging, supportive advising relationship in which students gain the confidence and security necessary to "be proactive and ask for the accommodations that they're due" (Advisor 8).

Often, students with disabilities, particularly those with learning or psychological disabilities, enter higher education with lower self-esteem than their peers without disabilities (Brinckerhoff, Shaw, & McGuire, 1993; Hill, 1996). The majority of the advisors also sought to empower students with disabilities by focusing their efforts on positively contributing to students' feelings of self-confidence and self-worth. Advisor 2 explained, "One of the things I try to do is empower them, to let them know that just because they have an accommodation, it doesn't make them any less worthy." All students, including those with disabilities, enrolled in institutions of higher education have demonstrated their capability of meeting admissions requirements and are deserving of the same opportunities to achieve academic success.

Advisor 12 shared that she tries "to empower students who have disabilities to recognize that it's a part of who they are and it doesn't define them." Advisor 11 declared that "nobody is a disability" and expressed his desire to help students with disabilities focus on their strengths, rather than their limitations. While the advisors expressed their recognition that disabilities may restrict students' abilities in some areas, they intimated that student empowerment is best achieved when these disabilities and their influence on the students' lives are embraced. Advisor 5 suggested that "one of the greatest things we can do is help students to feel comfortable with their limitations." As students become more comfortable with the limitations associated with their disabilities and recognize that they do not present insurmountable challenges, they are more likely to appreciate their strengths and become more confident in their abilities to pursue their goals and achieve success. Advisor 1 suggested that the foundation of student

empowerment is the student's "ability to be proud of his or her uniqueness." The advisors reflected that their interactions with students with disabilities allow them to help these students celebrate their uniqueness and their contributions to the campus community.

Theme Three: Advising students is comparable to putting a puzzle together.

The advisement process affords advisors an opportunity to help students set goals and develop plans for achieving success in academics and in life. The advisors, all of whom frequently reaffirmed their commitment to student success, revealed that helping students set and achieve their goals is "a puzzle to put together" (Advisor 3). Effective advisement requires consideration of, and respect for, the various aspects of students' lives. Advisor 5 explained that to be able to help students, advisors need to "really understand where students are coming from. They have all these issues, scheduling conflicts, work, children. They wear all these different hats." Acknowledging and recognizing the influence of non-academic factors on student success allows advisors to help students develop more effective, personalized plans for achieving their goals.

Contributing to students' academic success, specifically degree completion, represents a primary goal for all the advisors participating in this phase of the study. However, the advisors noted that focusing only on academic-specific issues may limit the effectiveness of the advisement process. Advisor 7 recalled that through her experiences providing advisement to students, she has learned that "personal issues, family issues, health issues, financial issues, are all actually related to how they're doing as a student. Advising can and should be very holistic."

Effective student advisement, like the assembly of a puzzle, requires that the individual pieces be fitted together to see the complete picture. Advisor 1 added, "once you know what all the pieces are, you can put them together like a jig saw puzzle." Each student is unique and brings varied experiences, needs, and pieces with him or her into college. The majority of the advisors recognized that identifying these unique pieces is essential to helping students develop an individualized plan for success. Advisor 8 reiterated, "it's an important part of our job to help students be successful and see how the pieces fit together." When all the pieces are identified and fitted together properly, advisors can help students develop strategies for successfully achieving their academic and life goals. Advisement that does not focus specifically on academic issues, but considers all of the pieces of students' lives, often requires more of an advisor's time and efforts. However, it helps students set realistic, achievable goals that take into account the influence of external factors on their academic pursuits.

Theme Four: Appreciating and respecting individuality is crucial for effectiveness.

No two students in higher education share the same background, learning styles, abilities, experiences, or needs. As a result of the diversity among students in higher education, no one approach to academic advisement will effectively meet the needs of all students (Saunders & Ervin, 1984). In recognition of, and respect to, the individuality of each student, all the advisors participating in this phase of the study have endeavored to tailor their advisement practices to meet the very specific needs of each of their advisees. Advisor 4 explained that though he follows a similar approach to advising with all students, he realizes that "not everyone succeeds the same way or needs the same kind of

attention." Advisor 9 agreed that "a lot of times, you just have to take a general approach, but remember that every student is different." Each of the advisors revealed that they individualize their advisement practices based on the specific interests, needs, weaknesses, and strengths of their students. By doing so, the advisors helped create realistic opportunities for students to "do what they can do and succeed in what they want to succeed in to the best of their abilities" (Advisor 11).

Though course selection and scheduling remain important aspects of academic advising, all 12 advisors explained that consideration of individual needs allows them to help students develop a personalized plan for completing degree requirements. Advisor 2 explained, "it takes more of me appreciating who each individual student is and recognizing and understanding what their needs are and then helping them develop that plan to be successful." As advisors become familiar with students' specific needs and the influences that may impede their academic success, they are better able to assist students in determining how to best achieve their goals. Advisor 1 reflected, "it's part of our job to look at each person individually." There is no one specific approach to advisement that best meets the needs of all students. Each of the advisors recognized that understanding and appreciating each student as an individual who has unique needs, skills, knowledge, and experiences allowed them to customize their advisement practices.

Theme Five: Asking specific questions is essential to helping identify student needs.

To develop relationships with students and become familiar with the unique qualities and characteristics of each, all the advisors have found that asking questions provides opportunities for students to share information that may otherwise remain

undisclosed. In higher education, the responsibility of disability disclosure belongs to the student. Advisor 11 explained, "If students don't want to tell me, that's their personal preference and I'm not going to force the issue." Students with disabilities may choose to immediately disclose their disability and seek accommodations. Others, however, may choose not to disclose their disability status.

All of the advisors participating in this phase of the study understood that it is illegal to directly ask a student if he or she has a disability. Advisor 9 summarized the practice of all of the advisors in regard to determining disability status with his statement, "I'm not going to tell a student that they have a disability. And I'm never going to ask them if they have a disability." Though none of the advisors would directly inquire about a student's disability status, they did explain that they ask specific questions to help them become familiar with each student's needs, interests, and background. Table 4 presents a summary of the questions that these advisors have typically posed to students with disabilities during advisement.

Table 4

Typical Questions Asked by Advisors

Question	Purpose		
	Establish individuality	Establish cause of difficulty	Provide opportunity to disclose
What are your interests?	X		
In addition to school, what other commitments do you have?	X		
What do you do in your free time?	X		
What would you like to be doing in 10 years?	X		
What can I do to help you?	X		
Are you going to class?		X	
Do you have the book?		X	
Where are you sitting?		X	
Are you taking notes?		X	
What is causing you the most trouble?		X	X

Responses to these questions allowed the advisors to provide advisement that was tailored to meet the specific needs and interests of each individual student. Advisor 10 explained that asking specific questions allows her to "see what the student's roadblocks to success might be and make sure I don't do something to create an additional road block." If a student voluntarily disclosed a disability in response to any of these

questions, the advisor then referred the student to the campus disability services office where the process of documenting the disability and requesting and arranging accommodations was initiated. If a student did not disclose a disability, the advisor provided a referral to support services on campus that were not specifically disability-related.

Theme Six: Referrals to the disability support services office are vital for success.

Each of the advisors understood and appreciated the importance of accommodations for students with disabilities. All of the advisors indicated that upon a student's disability disclosure, they promptly referred him or her to the institutional disability services office. Advisor 10 stated that once she learns a student has a disability her response is "do not pass go, do not collect $200, let's go to ODA and get things set up." Referring students to the institutional disability services office helps ensure that students will receive appropriate accommodations.

The advisors recognized that the process for requesting accommodations requires students to document their disabilities with the disability services office. Advisor 5 explained that she tells students, "you have to go over there and provide documentation. That's the process." Advisor 8 suggested that "the best thing that advisors can do is make sure that students are being proactive and asking for and getting the accommodations that they need." Though the advisors expressed a desire to help students who may not have completed the documentation process, they recognized that doing so could create an inappropriate precedent. Therefore, as Advisor 5 declared, "They have to have that letter." Once students had documented their disabilities and arranged accommodations,

the advisors sought to help ensure that they were receiving and being benefitted by those accommodations.

Quantitative Data Analysis

Invitations to participate in this study were sent via email to two National Academic Advising Association (NACADA) listservs, 20 state academic advising associations, and disability services or student support offices at 300 institutions of higher education across the United States. Qualtrics (2013) was used as the platform for this web-based survey which was accessible to invited participants for a two-week period via a specific URL. The *Academic Advisement for Students with Disabilities Advisor Questionnaire* (Appendix B) was comprised of 41 multiple-choice items that explored advisors' roles, training, and advisement practices related to students with disabilities. Additionally, descriptive information about advisors' employing institutions and demographic characteristics were collected.

Upon expiration of the two-week quantitative data collection period, raw data were downloaded from Qualtrics (2013) to SPSS version 20.0. Responses were obtained from 387 academic advisors. A response rate could not be calculated because the invitations to participate in the study were disseminated through listservs and designated office contacts. Due to the probability of overlapping membership in state academic advising associations and NACADA, and the likelihood that disability services and student support advisors are members of an advising association, the researcher estimated that approximately 2,000 advisors received an invitation to participate in this study. However, the specific number of advisors who actually received an email invitation to

participate in this study was unknown. Prior to analysis, data were screened for missing and outlying values. A descriptive analysis was conducted to determine the frequency of valid responses for each of the items in the survey instrument. Following the descriptive analysis, statistical analyses of the research hypotheses were conducted.

Description of Sample

Nearly three-fourths (73.1%) of advisors who participated in this study were female. Over half (57.4%) of the participants reported their age was between 30 and 50 years. More than one-third (37%) of all participants were between the ages of 30 and 39. Demographic information including gender and age of survey participants are presented in Table 5.

Table 5

Demographic Characteristics of Advisors

Characteristic	Frequency	Percent
Gender		
Male	104	26.9
Female	283	73.1
Age		
Less than 25	4	1.0
25-29	65	16.8
30-39	143	37.0
40-49	79	20.4
50-59	66	17.1

Table 5 (continued).

Characteristic	Frequency	Percent
Age		
60-64	25	6.5
Over 65	5	1.3

Figure 1 presents the racial/ethnic characteristics of the advisors participating in this study. The majority (73.9%) of advisors reported their race as Caucasian. The second largest racial group, African Americans, comprised approximately 17% of the sample.

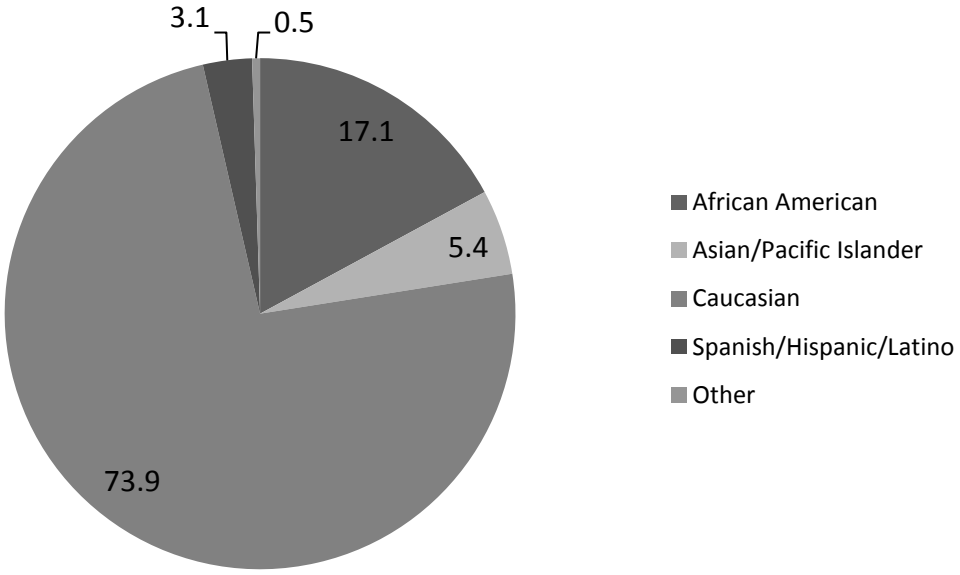

Figure 1. Racial/Ethnic Characteristics of Advisors.

Additional demographic characteristics including education level and current salary are displayed in Table 6. The Master's degree was the highest degree earned by

nearly two-thirds (64.1%) of survey respondents. Approximately half (50.6%) of the advisors participating in this study indicated that they currently earn between $30,000 and $50,000 annually.

Table 6

Additional Demographic Characteristics of Advisors

Characteristic	Frequency	Percent
Highest Degree Earned		
Bachelor's	36	9.3
Master's	248	64.1
Specialist	23	5.9
PhD, EdD, or Professional	77	19.9
Other	3	0.8
Current Salary		
Less than $22,050	6	1.6
$22,050-$29,999	7	1.8
$30,000-$39,999	89	23.0
$40,000-$49,999	107	27.6
$50,000-$59,999	71	18.3
$60,000-$69,999	42	10.9
$70,000-$79,999	24	6.2
$80,000-$89,999	12	3.1
$90,000-$99,999	15	3.9
$100,000 or more	14	3.6

Institutional Description

Advisors participating in the quantitative phase of this study represented all ten regions of the U.S. Department of Education. Region IV, which includes Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee, was the most highly represented region with 28.7% of advisors identifying this as the location of their employing institution. Regional frequency representations are presented in Table 7.

Table 7

Regional Representation of Advisors

Region	States within Region	Frequency	Percent
I	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	21	5.4
II	New Jersey, New York, Puerto Rico, Virgin Islands	20	5.2
III	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia	28	7.2
IV	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee	111	28.7
V	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin	89	23.0
VI	Arkansas, Louisiana, New Mexico, Oklahoma, Texas	19	4.9
VII	Iowa, Kansas, Missouri, Nebraska	39	10.1
VIII	Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming	12	3.1
IX	Arizona, California, Hawaii, Nevada	24	6.2
X	Alaska, Idaho, Oregon, Washington	24	6.2

The employing institutions of the advisors participating in this study varied not only by geographic region, but by type as well. Most (63.6%) of the advisors reported that they were employed by institutions that are described as public, four-year colleges or universities. Figure 2 provides a graphical representation of the types of institutions represented by participants in this study.

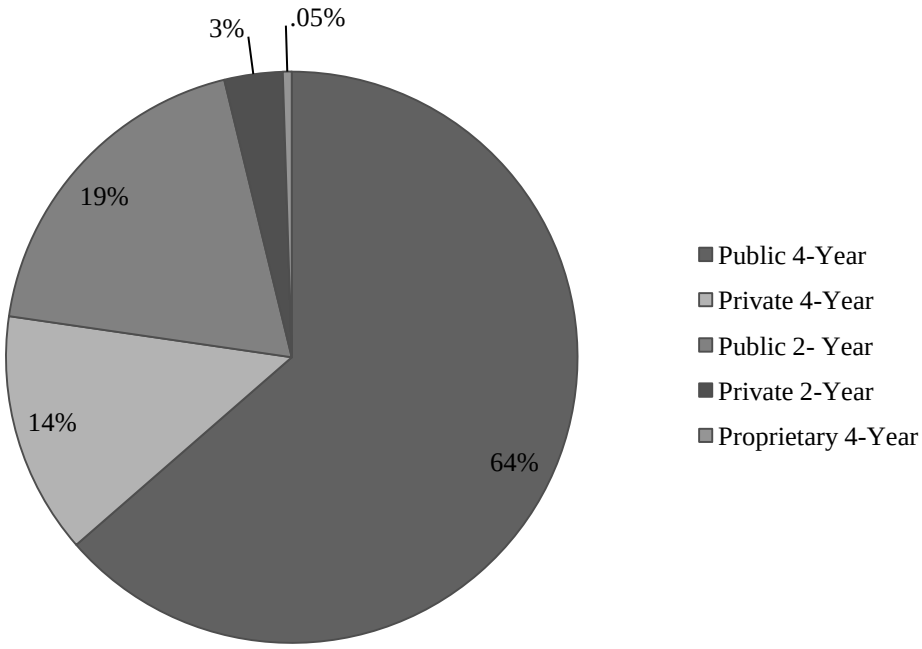

Figure 2. Type of Employing Institution

Advising Role

Each of the individuals who participated in this study provided academic advisement to undergraduate students in fulfillment of their job responsibilities. The majority (65.9%) of the participants described their role as academic advisor or counselor. A similar percentage (64.1%) reported that academic advisement represented their full-time job responsibility. Those individuals who described their role as "other"

indicated that they were advising or disability services directors. Table 8 provides a summary of the characteristics of the advising role of these participants.

Table 8

Description of Advising Role

Advising Characteristic	Frequency	Percent
Role		
Faculty Advisor	99	25.6
Academic Advisor/Counselor	255	65.9
Other	33	8.5
Time		
Part-time	139	35.9
Full-time	248	64.1
Experience		
Less than 2 years	57	14.7
2-5 years	108	27.9
6-10 years	105	27.1
10-15 years	61	15.8
More than 15 years	56	14.5

During their careers, advisors are likely to provide advisement to students with disabilities, but they may be unaware of each student's disability status. Students in higher education are not required to disclose their disability status; however, in order to

receive accommodations, students are responsible for disclosing and documenting their disabilities. Advisors may only be aware of a student's disability status if that student chooses to disclose. Over one-fourth (27.4%) of the advisors in this study revealed they did not know what percentage of their advisees had some type of disability. Further, almost half (46.8%) reported that fewer than 10% of the students they advise had a disability. Though advisors had encountered various types of disabilities, nearly 60% reported that learning disabilities were most common. Table 9 displays descriptive frequencies of advisor reported experiences advising students with disabilities.

Table 9

Advisor Reported Experiences Advising Students with Disabilities

Experience	Frequency	Percent
Advisees with disabilities		
Less than 10%	181	46.8
10-25%	78	20.2
26-50%	17	4.4
51-75%	3	0.8
76-99%	1	0.3
100%	1	0.3
Do not know	106	27.4

Table 9 (continued).

Experience	Frequency	Percent
Commonly Encountered Disability		
Physical	19	4.9
Learning	232	59.9
Mental	31	8.0
Emotional	46	11.9
I have not encountered disability	3	14.5
Other	21	5.4

Advisor Training

Academic advisors may have received training to prepare them for their roles in higher education. This preparation may have resulted from postsecondary coursework or through on-the-job training. Study participants were asked to provide information regarding the training they received to prepare them for their roles. Over half (55.8%) of respondents reported that they were either inadequately prepared, or unsure of the adequacy of their preparation, for advising students with disabilities. Table 10 provides the descriptive percentages for advisor training.

Table 10

Training for Advising Role

Training	Percent		
	Yes	No	Do Not Know
Postsecondary coursework to address disability-related issues	34.9%	64.6%	0.5%
Requirements of ADA and ADAAA	37.7%	59.4%	2.8%
Available institution disability research	65.6%	33.3%	1.0%
Adequate preparation for advising students with disabilities	44.2%	38.5%	17.3%

Advisement Type

Participants were asked to identify specific characteristics of their advisement practices including familiarity with students and availability for, approach to, and purpose of advising. These characteristics were presented as answer choices for four specific questions included in the *Academic Advisement for Student with Disabilities Advisor Questionnaire* (Appendix B). Answer choices associated with a prescriptive approach to advisement were coded as 1, while those choices associated with descriptive and intrusive styles of advisement were coded as 2 and 3, respectively. Individual responses for each of the four questions exploring these characteristics were used to calculate an average score which was reflective of the advisor's dominant advisement type: prescriptive, developmental, or intrusive. The range of the average score was 1.0 to 3.0 and was calculated by summing the coded values associated with each of the

characteristics and dividing by four, the number of questions specifically related to advisement type. Respondents whose average score ranged from 1.0 to 1.5 were identified as prescriptive advisors. Descriptive advisors were those whose average scores ranged from 1.75-2.5. A range of 2.75-3.0 defined respondents as intrusive advisors.

For the purposes of this study, the researcher defined the range that was indicative of each advisement type. Prescriptive advisement represented the most basic approach to advising and the foundation upon which descriptive and intrusive advisement were developed. The researcher concluded that developmental advisement includes tenets of prescriptive advisement and intrusive advisement includes tenets of developmental advisement. In consideration of this fact, the researcher defined the range for each advisement type by identifying the values that, when rounded to the nearest whole number, would be coded as 1, 2, or 3. Scores ending in .5 were included in the range for the lower coding value. Based on their average score, over three-fourths (78.6%) of advisors indicated that they practice a developmental approach to advising. Table 11 presents the descriptive frequencies for advisement type.

Table 11

Advisement Type Frequencies

Advisement Type	Average Score (Calculated)	Frequency	Percent
Prescriptive	1.0-1.5	41	10.6
Developmental	1.75-2.5	304	78.6
Intrusive	2.75-3.0	42	10.9

Appropriateness of Advisement Scenario Responses

Survey participants were asked to watch video vignettes of six advisement scenarios involving students with disabilities. After viewing each vignette, advisors were presented with questions related to that specific scenario and asked to select the answer choice that most closely represented their probable response in a similar situation. Four answer choices were provided for each question and only one represented an appropriate response. Compliance with disability law and accommodation requirements provided rationale (Appendix K) for the appropriate advisement scenario responses included in the *Academic Advisement for Students with Disabilities Advisor Questionnaire* (Appendix B). Table 12 provides a summary of the frequencies of the appropriate responses to the six scenarios presented.

Table 12

Frequencies of Appropriate Advisement Scenario Responses

Response	Appropriate	Frequency	Percent
Scenario 1, Question 30			
I will work with the director of the study abroad programs to determine if arrangements could be made to provide taped books and readers for you so that you can study.	No	80	20.7
Have you spoken with the director of the study abroad programs about this?	No	141	36.4
I am sorry, but there is nothing I can do to help.	No	--	--
Have you contacted the office of disability services here on campus? They may be able to help.	Yes	166	42.9
Scenario 1, Question 31			
Since Adeleigh says she has a learning disability, as her advisor, I must ensure that she receives taped books and readers.	No	21	5.4
Adeleigh can participate in the study abroad program, but will be exempted from the required reading and exams because of her disability.	No	--	--
Adeleigh may receive appropriate accommodations if she contacts the office of disability services and tells them she has a learning disability.	No	87	22.5
Adeleigh may receive appropriate accommodations if she contacts the office of disability services and provides documentation of her disability.	Yes	279	72.1

Table 12 (continued).

Response	Appropriate	Frequency	Percent
Scenario 2, Question 32			
Since Dinorah is not an American student, she is not eligible for disability accommodations.	No	--	--
Dinorah's difficulty is probably a result of a language barrier and not dyslexia.	No	42	10.9
Even though Dinorah is an international student, if she provides documentation of her dyslexia, she will be eligible for disability accommodations.	Yes	325	84.0
The institutional disability services office will not accept foreign documentation of disabilities.	No	20	5.2
Scenario 2, Question 33			
Contact your professors and ask if more time could be allowed for you to complete exams and in-class exercises.	No	13	3.4
Contact the student support services office and inquire about available campus learning assistance.	No	54	14.0
Contact the disabilities service office to determine if you qualify for accommodations and assistance that may be helpful.	Yes	306	79.1
Drop the class that poses the greatest challenge so you can focus your attention on the others.	No	14	3.6
Scenario 3, Question 34			
I think you might have a learning disability.	No	24	6.2
Have you ever sought tutoring or some type of assistance?	Yes	325	84.0
Have you considered changing your major?	No	22	5.7
You have to take this course because it is required.	No	16	4.1

Table 12 (continued).

Response	Appropriate	Frequency	Percent
Scenario 3, Question 35			
What type of disability do you have?	No	9	2.3
Have you spoken with anyone here at the institution about this?	No	197	50.9
What other accommodations did you receive in high school?	Yes	119	30.7
What other accommodations would be helpful for you?	No	62	16.0
Scenario 3, Question 36			
They can make you successful.	No	40	10.3
You have a disability and need extra help.	No	30	7.8
They may be able to help you make arrangements for accommodations like you had in high school.	Yes	307	79.3
If you are enrolled in college, federal laws require you to disclose any disability you may have.	No	10	2.6
Scenario 4, Question 37			
Have you ever been diagnosed with a learning disability?	No	10	2.6
Have you visited the writing center and student support services on campus?	No	177	45.7
Have you ever received special services like tutoring or individual assistance?	Yes	161	41.6
Have you considered being tested for a learning disability?	No	39	10.1

Table 12 (continued).

Response	Appropriate	Frequency	Percent
Scenario 4, Question 38			
Speak to other professors about your suspicion that she has an undisclosed disability and ask for their suggestions regarding how to help her.	No	21	5.4
Encourage her to be tested for a learning disability.	No	21	5.4
Explain to her that you suspect she has a disability and encourage her to disclose it.	No	57	14.7
Encourage her to seek assistance from the writing center and student support services.	Yes	288	74.4
Scenario 5, Question 39			
There are a lot of lab requirements for chemistry majors.	No	23	5.9
Working at a lab bench may be difficult because of your disability.	No	4	1.0
Do you have a strong background in science?	No	163	42.1
The disability services office on campus can help you arrange appropriate accommodations.	Yes	197	50.9
Scenario 5, Question 40			
The disability services office on campus will set up those accommodations for you.	No	95	24.5
Personal care aides do not fall within the scope of accommodations provided by the institution, but the disability services office may be able to provide you with contact information for local agencies that provide those services.	Yes	176	45.5
The admissions office should have notified you of the institution's accommodations policies.	No	2	.5

Table 12 (continued).

Response	Appropriate	Frequency	Percent
Scenario 6, Question 41			
You may want to reconsider your decision because of your visual impairment.	No	--	--
If you choose to change your major to computer programming, accommodations might be necessary to help you read computer screens.	Yes	227	58.7
It will be very difficult for you to fulfill the requirements of the computer programming degree.	No	17	4.4
You should talk to the chair of the computer programming department and determine if that program is a good fit for you.	No	143	37.0

Dependence of Appropriate Response Selection on Observed Video Vignette

A Chi-square test of independence was conducted to determine if a significant dependence existed between which version of each scenario was observed and the selection of the appropriate response to each of the corresponding questions. Fundamentally, this analysis examined whether the selection of the appropriate response was independent of the combination of race and gender of the advisor in each video vignette. A significant dependence, $(\chi^2(3) = 8.756, p = .033)$, was found only for observed scenario version and selection of the appropriate response when a student asked why he should contact the disability studies. Standardized residuals provided no significant additional information to suggest which of the versions may have contributed to this significant Chi-square result.

Influence of Training on Appropriate Response Selection

Survey participants were asked to indicate whether they had received education or training related to disability issues that prepared them for their roles as academic advisors. Specifically, advisors were asked to answer yes, no, or do not know to five questions included in the *Academic Advisement for Students with Disabilities Advisor Questionnaire* (Appendix B) that asked if they had received training related to disability issues, ADA and ADAAA, and institutional disability services and if the training had adequately prepared them to advise students with disabilities. The answer choice yes was coded as 1, while no and do not know were coded as 2 and 3, respectively. Individual responses for each of the five questions exploring advisor training were used to calculate an average score which was reflective of the self-reported adequacy of the advisor's training. The range of the average training adequacy score was 1.0 to 3.0 and was calculated by summing the coded values for each of the questions specifically related to preparation for advising students with disabilities and dividing by five.

For the purposes of this study, the researcher defined the range that was indicative of adequate training. Since advisors could affirmatively report receipt of training specifically related to disability issues, laws, and services and could self-report this training as adequate preparation for their advisement roles, the researcher concluded that selection of the answer choice yes, which was coded as 1, for the majority of the questions specific to disability training would define the range for adequate training. An average score ranging from 1.0 to 1.4 was indicative of adequate training. Advisors could also respond negatively or with uncertainty to the questions specifically related to

disability issues, laws, and services and adequacy of training preparation. The researcher concluded that selection of the answer choice no or do not know, which were coded as 2 and 3, respectively, for the majority of these questions was reflective of inadequate training. Therefore, 1.6-3.0 was defined as the range for inadequate training.

A one-way ANOVA was conducted to determine if self-reported adequacy of disability-related advisor training significantly affected the number of advisement scenario questions for which the advisors' responses appropriately complied with disability law and accommodation requirements. There was no significant effect, $F(1, 385) = 3.466$, $p = .063$, of training adequacy on the number of appropriate advisement scenario responses selected by the advisors.

Test of Hypotheses

Based on the research questions guiding the quantitative phase of this study, three research hypotheses were developed. The research hypotheses stated that advisement practices were dependent upon advisor status, institution type, or advisement type. Bonferroni adjusted alpha levels of .0167 (0.5/3) were used in the tests of the three research hypotheses.

Hypothesis One

H_1: Advisement practices related to students with disabilities that reflect appropriate application of knowledge of student needs, disability laws, and accommodation requirements are dependent on an advisor's full-time or part-time status.

A Chi-square test of independence was conducted to determine if a significant dependence existed between an advisor's status as full-time or part-time and the selection

of the appropriate response to each of the advising scenarios presented. Calculated frequencies obtained through crosstabulations of appropriate response and advisor status are provided in Table 13. Results of the Chi-Square test are shown in Table 14.

Table 13

Appropriate Response by Advisor Status Crosstabulations

Scenario	Question	Appropriate Response	Part-Time Advisor Response		Full-Time Advisor Response	
			Yes (%)	No (%)	Yes (%)	No (%)
1	30	Contacted DSS?	33.1	66.9	48.4	51.6
1	31	Receive accommodations if documented	56.1	43.9	81.0	19.0
2	32	Documentation for accommodations eligibility	72.7	27.3	90.3	9.7
2	33	Contact DSS to determine if you qualify	72.7	27.3	82.7	17.3
3	34	Sought tutoring or individual assistance?	72.7	27.3	90.3	9.7
3	35	Other accommodations received?	31.7	68.3	30.2	69.8
3	36	May help with arrangements	64.7	35.3	87.5	12.5
4	37	Received special services?	45.3	54.7	39.5	60.5
4	38	Seek assistance from writing center	61.2	38.8	81.9	18.1
5	39	Disability support services can help arrange	51.8	48.2	50.4	49.6

Table 13 (continued).

Scenario	Question	Appropriate Response	Part-Time Advisor Response		Full-Time Advisor Response	
			Yes (%)	No (%)	Yes (%)	No (%)
5	40	Aides not included in accommodation	41.7	58.3	47.6	52.4
6	41	Accommodations might be necessary	56.8	43.2	59.7	40.3

Table 14

Chi-Square Results-Advisor Status

Scenario	Question	Appropriate Response	Pearson Chi-Square	df	Sig.
1	30	Contacted disability support services?	8.505	1	.004
1	31	Receive accommodations if documented	27.524	1	< .001
2	32	Documentation for accommodations eligibility	20.650	1	< .001
2	33	Contact DSS to determine if you qualify	5.382	1	.020
3	34	Sought tutoring or individual assistance?	20.650	1	< .001
3	35	Other accommodations received?	.083	1	.773
3	36	May help with arrangements	28.118	1	< .001
4	37	Received special services like tutoring?	1.237	1	.266

Table 14 (continued).

Scenario	Question	Appropriate Response	Pearson Chi-Square	df	Sig.
4	38	Seek assistance from writing center	20.056	1	< .001
5	39	Disability support services can help arrange	.069	1	.792
5	40	Aides not included in accommodations	1.231	1	.267
6	41	Accommodations might be necessary	.297	1	.586

A statistically significant dependence, $(\chi^2(1) = 8.505, p = .004)$, was found for advisor status and selection of the appropriate response for Scenario 1, Question 30. Full-time advisors (48.4%) would be more likely than part-time advisors (33.1%) to ask a student with a documented learning disability if she had contacted disability support services for help.

A statistically significant dependence, $(\chi^2(1) = 27.524, p < .001)$, was found for advisor status and selection of the appropriate response for Scenario 1, Question 31. Full-time advisors (81.0%) would be more likely than part-time advisors (56.1%) to tell a student with a documented learning disability that she may receive appropriate accommodations if she contacts the office of disability services and provides documentation of her disability.

A statistically significant dependence, $(\chi^2(1) = 20.650, p < .001)$, was found for advisor status and selection of the appropriate response for Scenario 2, Question 32. Full-time advisors (90.3%) would be more likely than part-time advisors (72.7%) to tell

an international student who discloses she has dyslexia that despite her nationality, if she provides documentation of her disability, she will be eligible for accommodations.

No statistically significant dependence, *($\chi^2(1) = 5.382$, $p = .020$)*, was found for advisor status and selection of the appropriate response for Scenario 2, Question 33. Telling an international student who discloses she has dyslexia to contact the disabilities services office to determine if she qualifies for accommodations appears to be independent of advisor status.

A statistically significant dependence, *($\chi^2(1) = 20.650$, $p < .001$)*, was found for advisor status and selection of the appropriate response for Scenario 3, Question 34. Full-time advisors (90.3%) would be more likely than part-time advisors (72.7%) to ask a student who reveals he has always struggled with math if he has ever sought tutoring or individual assistance.

No statistically significant dependence, *($\chi^2(1) = 0.83$, $p = .773$)*, was found for advisor status and selection of the appropriate response for Scenario 3, Question 35. Asking a student who reveals he had an IEP in high school what other accommodations he received appears to be independent of advisor status.

A statistically significant dependence, *($\chi^2(1) = 28.118$, $p < .001$)*, was found for advisor status and selection of the appropriate response for Scenario 3, Question 36. Full-time advisors (87.5%) would be more likely than part-time advisors (64.7%) to tell a student who had an IEP in high school and questions why he should contact the disability support services office that the staff in this office may be able to help him arrange accommodations similar to those he had in high school.

No statistically significant dependence, *($\chi^2(1) = 1.237$, $p = .266$)*, was found for advisor status and selection of the appropriate response for Scenario 4, Question 37. Asking a student who reveals that writing has always been difficult for her, but does not disclose a disability if she has ever received special services like tutoring or individual assistance appears to be independent of advisor status.

A statistically significant dependence, *($\chi^2(1) = 20.056$, $p < .001$)*, was found for advisor status and selection of the appropriate response for Scenario 4, Question 38. Full-time advisors (81.9%) would be more likely than part-time advisors (61.2%) to encourage a student who reveals that writing has always been difficult for her, but does not disclose a disability to seek assistance from the writing center and student support services.

No statistically significant dependence, *($\chi^2(1) = .069$, $p = .792$)*, was found for advisor status and selection of the appropriate response for Scenario 5, Question 39. Explaining to a student in a wheelchair who plans on majoring in chemistry that the disability services office can help arrange appropriate accommodations appears to be independent of advisor status.

No statistically significant dependence, *($\chi^2(1) = 1.231$, $p = .267$)*, was found for advisor status and selection of the appropriate response for Scenario 5, Question 40. Explaining to a student who inquires about the process of requesting a personal care aide that aides do not fall within the scope of accommodations provided by the institution appears to be independent of advisor status.

No statistically significant dependence, *($\chi^2(1) = .297$, $p = .586$)*, was found for advisor status and selection of the appropriate response for Scenario 6, Question 41. Explaining to a student who has a visual disability and wants to change her major to computer programming that accommodations might be necessary to help her read computer screens appears independent of advisor status.

Hypothesis Two

H_2: Advisement practices related to students with disabilities that reflect appropriate application of knowledge of student needs, disability laws, and accommodation requirements are dependent on whether an institution is defined as public 4-year, private 4-year, public 2-year, or private 2-year.

A Chi-square test of independence was conducted to determine if a significant level of dependence existed between the type of institution (public 4-year, private 4-year, public 2-year, or private 2-year) at which an advisor is employed and the selection of the appropriate response to each of the advising scenarios presented. Since institution type consists of three levels, standardized residuals were calculated and used in assessing the significance of each combination of institution type and appropriate response on overall statistically significant Chi-square results. For the purposes of this analysis, these standardized residuals, or z-scores, were directly compared with the critical value of *z* (±2.39) associated with the significance level ($p < .0167$) assigned to this test. Table 15 presents the standardized residuals calculated for each combination of institution type and appropriate response. Chi-Square results are shown in Table 16.

No statistically significant dependence was found between institution type and selection of the response that appropriately complies with disability laws and accommodation requirements for any of the 12 questions associated with the six advising scenarios.

Table 15

Appropriate Response by Institution Type Standardized Residuals

Appropriate Response	Public 4-Year		Private 4-Year		Public 2-Year	
	Yes	No	Yes	No	Yes	No
Contacted disability support services?	-.2	.1	-1.4	1.2	1.5	-1.3
Receive accommodations if document	-.1	.2	-.9	1.5	1.0	-1.7
Documentation for eligibility	.3	-.8	-1.0	2.4	.3	-.6
Contact DSS to determine qualification	.2	-.5	-1.1	2.2	.5	-1.0
Sought tutoring or assistance?	.0	.0	-.4	1.0	.4	-.9
Other accommodations received?	-.8	.5	1.4	-.9	.3	-.2
May help with arrangements	.2	-.4	-.6	1.2	.1	-.3
Received special services like tutoring?	-.5	.4	-.1	.0	1.0	-.8
Seek assistance from writing center	.1	-.2	-.4	.6	.1	-.1
Disability services can help arrange	.2	-.2	-.9	.9	.4	-.4
Aides not included in accommodations	-.3	.2	-1.0	.9	1.4	-1.2
Accommodations might be necessary	.0	.0	-.6	.7	.4	-.5

Table 16

Chi-Square Results-Institution Type

Scenario	Question	Appropriate Response	Pearson Chi-Square	df	Sig.
1	30	Contacted disability support services?	6.949	2	.031
1	31	Receive accommodations if documented	7.285	2	.026
2	32	Documentation for accommodations eligibility	8.197	2	.017
2	33	Contact DSS to determine if you qualify	7.622	2	.022
3	34	Sought tutoring or individual assistance?	2.285	2	.319
3	35	Other accommodations received?	3.752	2	.153
3	36	May help with arrangements	2.043	2	.360
4	37	Received special services like tutoring?	2.050	2	.359
4	38	Seek assistance from writing center	.607	2	.738
5	39	Disability support services can help arrange	1.935	2	.380
5	40	Aides not included in accommodations	5.470	2	.065
6	41	Accommodations might be necessary	1.328	2	.515

No statistically significant dependence, $(\chi^2(2) = 6.949, p = .031)$, was found for institution type and selection of the appropriate response for Scenario 1, Question 30. Asking a student with a documented learning disability if she had contacted disability support services for help appears to be independent of institution type.

No statistically significant dependence, $(\chi^2(2) = 7.285, p = .026)$, was found for institution type and selection of the appropriate response for Scenario 1, Question 31.

Telling a student with a documented learning disability that she may receive appropriate accommodations if she contacts the office of disability services and provides documentation of her disability appears to be independent of institution type.

No statistically significant dependence, *($\chi^2(2) = 8.197$, $p = .017$)*, was found for institution type and selection of the appropriate response for Scenario 2, Question 32. Telling an international student she would be eligible for accommodations if she provided documentation of her disability appears to be independent of institution type.

No statistically significant dependence, *($\chi^2(2) = 7.622$, $p = .022$)*, was found for institution type and selection of the appropriate response for Scenario 2, Question 33. Telling an international student with dyslexia to contact the disabilities services office to determine if she qualified for accommodations appears to be independent of .

No statistically significant dependence, *($\chi^2(2) = 2.285$, $p = .319$)*, was found for institution type and selection of the appropriate response for Scenario 3, Question 34. Asking a student who reveals he has always struggled with math if he has ever sought tutoring or individual assistance appears to be independent of institution type.

No statistically significant dependence, *($\chi^2(2) = 3.752$, $p = .153$)*, was found for institution type and selection of the appropriate response for Scenario 3, Question 35. Asking a student who reveals he had an IEP in high school what other accommodations he received appears to be independent of institution type.

No statistically significant dependence, *($\chi^2(2) = 2.043$, $p = .360$)*, was found for institution type and selection of the appropriate response for Scenario 3, Question 36. Telling a student who had an IEP in high school and questions why he should contact the

disability support services office that the staff in this office may be able to help him arrange accommodations similar to those he had in high school appears to be independent of institution type.

No statistically significant dependence, *($\chi^2(2) = 2.050$, $p = .359$)*, was found for institution type and selection of the appropriate response for Scenario 4, Question 37. Asking a student who reveals that writing has always been difficult for her, but does not disclose a disability, if she has ever received special services like tutoring or individual assistance appears to be independent of institution type.

No statistically significant dependence, *($\chi^2(2) = .607$, $p = .738$)*, was found for institution type and selection of the appropriate response for Scenario 4, Question 38. Encouraging a student who reveals that writing has always been difficult for her but does not disclose a disability to seek assistance from the writing center and student support services appears to be independent of institution type.

No statistically significant dependence, *($\chi^2(2) = 1.935$, $p = .380$)*, was found for institution type and selection of the appropriate response for Scenario 5, Question 39. Explaining to a student in a wheelchair who plans on majoring in chemistry that the disability services office can help arrange appropriate accommodations appears to be independent of institution type.

No statistically significant dependence, *($\chi^2(2) = 5.470$, $p = .065$)*, was found for institution type and selection of the appropriate response for Scenario 5, Question 40. Explaining to a student who inquires about the process of requesting a personal care aide

that aides do not fall within the scope of accommodations provided by the institution appears to be independent of institution type.

No statistically significant dependence, *($\chi^2(2) = 1.328$, $p = .515$),* was found for institution type and selection of the appropriate response for Scenario 6, Question 41. Explaining to a student who has a visual disability and wants to change her major to computer programming that accommodations might be necessary to help her read computer screens appears to be independent of institution type.

Hypothesis Three

H_3: Advisement practices related to students with disabilities that reflect appropriate application of knowledge of student needs, disability laws, and accommodation requirements are dependent on the predominant advisement type-prescriptive, developmental, or intrusive-used by an advisor.

A Chi-square test of independence was conducted to determine if a significant level of dependence existed between an advisor's primary advisement type and the selection of the appropriate response to each of the advising scenarios presented. Since advisement type consists of three levels, standardized residuals were calculated and used in assessing the significance of each combination of institution type and appropriate response on overall statistically significant Chi-square results. For this analysis, these standardized residuals were directly compared with the critical value of *z* (±2.39) associated with the significance level ($p < .0167$) significance level. Standardized residuals for each combination of advisement type and appropriate response are shown in Table 17. Results of the Chi-Square test are shown in Table 18.

Table 17

Appropriate Response by Advisement Type Standardized Residuals

Appropriate Response	Public 4-Year		Private 4-Year		Public 2-Year	
	Yes	No	Yes	No	Yes	No
Contacted disability support services?	-2.4	1.8	1.3	-1.1	-1.4	1.2
Receive accommodations if documented	-1.8	2.8	.5	-.7	.5	-.8
Documentation for accommodations eligibility	-2.3	5.2	.7	-1.7	.3	-.7
Contact DSS to determine if you qualify	-1.1	2.2	.3	-.6	.3	-.6
Sought tutoring or individual assistance?	-1.6	3.7	.5	-1.1	.3	-.7
Other accommodations received?	2.4	-1.6	-1.2	.8	.9	-.6
Received special services like tutoring?	-.7	.6	.3	-.3	-.1	.
Seek assistance from writing center	-1.4	2.3	.4	-.7	.3	-.5
Disability support services can help arrange	-.8	.9	.5	-.5	-.5	.5
Accommodations might be necessary	1.2	-1.4	-.6	.7	.5	-.6

Table 18

Chi-Square Results-Advisement Type

Scenario	Question	Appropriate Response	Pearson Chi-Square	df	Sig.
1	30	Contacted disability support services?	13.722	2	.001
1	31	Receive accommodations if documented	12.716	2	.002
2	32	Documentation for accommodations eligibility	36.582	2	< .001
2	33	Contact DSS to determine if you qualify	6.959	2	.031
3	34	Sought tutoring or individual assistance?	18.106	2	< .001
3	35	Other accommodations received?	11.168	2	.004
3	36	May help with arrangements	46.318	2	< .001
4	37	Received special services like tutoring?	1.129	2	.569
4	38	Seek assistance from writing center	8.184	2	.017
5	39	Disability support services can help arrange	2.516	2	.284
5	40	Aides not included in accommodations	2.678	2	.262
6	41	Accommodations might be necessary	5.048	2	.080

A statistically significant dependence, $(\chi^2(2) = 13.722, p = .001)$, was found for advisement type and selection of the appropriate response for Scenario 1, Question 30. The standardized residual value for prescriptive advisors who asked a student with a documented learning disability who was interested in studying abroad if she had contacted disability support services was significant (z = -2.4). This indicated that fewer

prescriptive advisors than expected would ask a student with a documented learning disability if she had contacted disability support services for help.

A statistically significant dependence, *($\chi^2(2) = 12.716, p = .002$)*, was found for advisement type and selection of the appropriate response for Scenario 1, Question 31. The standardized residual value for prescriptive advisors who did not tell a student with a documented learning disability that she might received accommodations if she contacted the disability support services office was significant (z = 2.8). This indicated that more prescriptive advisors than expected would not tell a student with a documented disability to contact disability support services.

A statistically significant dependence, *($\chi^2(2) = 36.582, p < .001$)*, was found for advisement type and selection of the appropriate response for Scenario 2, Question 32. Significant standardized residuals were found for prescriptive advisors who did not (z = 5.2) tell an international student who disclosed that she has dyslexia that providing documentation of her disability would make her eligible for accommodations. This indicated that more prescriptive advisors than expected would not tell the student that providing documentation of her disability would make her eligible for accommodations.

No statistically significant dependence, *($\chi^2(2) = 6.959, p = .031$)*, was found for advisement type and selection of the appropriate response for Scenario 2, Question 33. Telling an international student who disclosed she had dyslexia to contact the disabilities services office to determine if she qualified for accommodations appears to be independent of advisement type.

A statistically significant dependence, *($\chi^2(2) = 18.106$, $p < .001$)*, was found for advisement type and selection of the appropriate response for Scenario 3, Question 34. The standardized residual for prescriptive advisors who did not ask a student who has always struggled with math if he has ever sought tutoring or individual assistance was significant (z = 3.7). This indicated that more prescriptive advisors than expected would not ask the student if he had sought tutoring.

A statistically significant dependence, *($\chi^2(2) = 11.168$, $p = .004$)*, was found for advisement type and selection of the appropriate response for Scenario 3, Question 35. A significant standardized residual was found (z = 2.4) for prescriptive advisors who asked a student who had an IEP in high school what other accommodations he received. This indicated that more prescriptive advisors than expected would ask the student about other accommodations he received in high school.

A statistically significant dependence, *($\chi^2(2) = 46.318$, $p < .001$)*, was found for advisement type and selection of the appropriate response for Scenario 3, Question 36. Standardized residuals for prescriptive advisors who did (z = -2.9) and did not (z = 5.7) tell a student who had an IEP in high school that the disability support services office may be able to help him arrange accommodations similar to those he had in high school. This indicated that fewer prescriptive advisors than expected would tell a student who had an IEP in high school that the disability support services office may be able to help him arrange accommodations similar to those he had in high school. This also indicated that more prescriptive advisors than expected would not tell a student who had an IEP in

high school that the disability support services office may be able to help him arrange accommodations similar to those he had in high school.

No statistically significant dependence, *($\chi^2(2) = 1.129$, $p = .569$)*, was found for advisement type and selection of the appropriate response for Scenario 4, Question 37. It appears that asking a student who typically experienced difficulty writing, but did not disclose a disability if she had ever received special services like tutoring or individual assistance is independent of advisement type.

No statistically significant dependence, *($\chi^2(2) = 8.184$, $p = .017$)*, was found for advisement type and selection of the appropriate response for Scenario 4, Question 38. Encouraging a student who had always experienced difficulty writing, but did not disclose a disability to seek assistance from the writing center and student support services appears to be independent of advisement type.

No statistically significant dependence, *($\chi^2(2) = 2.516$, $p = .284$)*, was found for advisement type and selection of the appropriate response for Scenario 5, Question 39. Explaining to a student in a wheelchair who plans on majoring in chemistry that the disability services office can help arrange appropriate accommodations appears to be independent of advisement type.

No statistically significant dependence, *($\chi^2(2) = 2.678$, $p = .262$)*, was found for advisement type and selection of the appropriate response for Scenario 5, Question 40. Explaining to a student who inquires about the process of requesting a personal care aide that aides do not fall within the scope of accommodations provided by the institution appears to be independent of advisement type.

No statistically significant dependence, *($\chi^2(2) = 5.048$, $p = .080$)*, was found for advisement type and selection of the appropriate response for Scenario 6, Question 41. It appears that explaining to a student who has a visual disability that accommodations might be necessary to help her read computer screens is independent of advisement type.

CHAPTER V

SUMMARY

Overview

This purpose of this study was to explore advisors' knowledge of the needs of students with disabilities, disability law, and accommodation requirements and to examine whether advisement practices are influenced by advisor status, advisement type and institution type. Participants in the quantitative phase of this study were current academic advisors at institutions of higher education geographically dispersed throughout the United States, while those participating in the qualitative phase were geographically dispersed, but regionally limited. During the qualitative phase of the study, the *Postsecondary Academic Advisor Practices Questionnaire* (Appendix B) was used to conduct interviews with 12 academic advisors at institutions of higher education in Alabama, Louisiana, Mississippi, and Tennessee. The *Postsecondary Academic Advisement Practices Questionnaire* (Appendix B) administered in the subsequent, quantitative phase, was completed by 387 academic advisors from various institutions of higher education across the United States.

Discussion and Conclusions

The results of the qualitative and quantitative data analyses were presented in Chapter IV. A discussion of these results is presented here.

Demographics

Generally, the majority of advisors participating in this study were Caucasian females. Eight of the 12 interview participants were Caucasian. Nine of these

individuals were female. Nearly three-fourths of the survey respondents were Caucasian (73.9%) and female (73.1%).

The length of advisement experience of interview participants ranged from five to 32 years, with an average of 13 years. Over half (55%) of survey participants reported having between two and ten years of experience advising undergraduate students. An additional 30.3% of survey participants reported that they had provided academic advisement for over ten years.

According to the National Center for Education Statistics (NCES), 11% of undergraduate students enrolled in higher education self-identified as having a disability (U.S. NCES, 2012). This figure may represent a considerable underestimate since disability disclosure is not required for students in postsecondary education. In higher education, only request and receipt of accommodations, not enrollment, requires disclosure and documentation of disability status. Interview participants estimated that an average of eight percent of the students they had advised had a disability. Almost half (46.8%) of survey respondents indicated that less than ten percent of their advisees have a disability. The low percentages of advisees with disabilities estimated by the advisors in this study compliment the figures presented by U.S. NCES (2012) that suggest a relatively low number of students in higher education have disabilities. Over one-fourth (27.4%) of survey respondents indicated that they did not know what percentage of the students they advised had a disability. This may be attributed to students' nondisclosure decisions and supports the notion that the population of students with disabilities in higher education is underestimated.

Study participants indicated that learning disabilities were the most common type of disability they encountered when advising students. Nine of the interview participants reported learning disabilities as the disability type most common in the students that they advise. Advisors participating in the qualitative phase of the study responded similarly, with 59.9% reporting learning disabilities as most prevalent in their advisement encounters.

Only one of the interview participants was a full-time advisor. The other interview participants were faculty advisors who provided academic advisement to undergraduate students on a part-time basis within the scope of their job responsibilities. The majority of survey participants described themselves as academic advisors or counselors (65.9%) who provide advisement full-time (64.1%). These results are contrary to suggestions in the literature that faculty are responsible for providing academic advisement in most institutions of higher education (Allen & Smith, 2008; Habley, 2004).

Collectively, 399 academic advisors representing all ten regions of the U.S. Department of Education participated in this study. Considering the national representation and size of this sample, the researcher expected a larger percentage of participants to describe their advisor status as part-time. Habley (2003) explained that the responsibility of providing academic advisement in the United States, historically, has been borne by faculty, for whom the practice is a part-time endeavor. However, Habley, Bloom, and Robbins (2012) reported that 55% of American institutions of higher education currently employ a shared advising method in which both faculty and full-time

advisors provide advisement to students. The shift away from faculty-only advisement may have contributed to the larger percentage of full-time advisors participating in this study.

Since only slightly more than one-third of study participants indicated they provided academic advisement on a part-time basis, the findings of this study were not consistent with the literature. However, the researcher concluded that this inconsistency might be attributed to the method of invitation dissemination. Full-time advisors may have comprised the majority of the membership of these advising associations, at the state and national levels, through which invitations to participate in this research were distributed. Further, disability services and student support centers may have been more likely to employ full-time staff, thereby contributing to the large percentage of full-time advisors participating in this research. If this conclusion is correct, one would expect full-time advisors to comprise the majority of this sample.

The researcher also concluded that the timing of data collection for this study may have contributed to an overrepresentation of full-time advisors. Qualitative data collection for this study occurred during a time that coincided with the break between summer and fall semesters at most postsecondary institutions. The timing of the interviews may have attributed to a higher representation of faculty advisors since they were less likely to be teaching during this time, and full-time advisors were more likely to be involved in helping students prepare for the upcoming fall semester. Quantitative data collection began after the fall semester had commenced. It is possible that faculty were underrepresented in the survey due to teaching responsibilities.

The researcher's preference for conducting in-person interviews limited the geographical representation of advisors in the qualitative phase of the study. All interview participants were employed by institutions of higher education in the researcher's home state of Mississippi or one of the neighboring states, Alabama, Louisiana, or Tennessee. This limitation did not apply to the quantitative phase of the study. Invitations to participate in the survey were sent to two NACADA listservs, state advising association listservs, and disability services or student support offices at two each of public four-year, private four-year, and public two-year institutions of higher education in all 50 states. Region IV, which includes Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee, was most highly represented in the survey with 28.7% of advisors identifying this as the region in which their institution is located. Familiarity with, and proximity to, the researcher's institution, which is located in Region IV, may have contributed to the higher representation of this region. Region VIII, which includes Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming, was the least represented region in the survey with only 3.1% of advisors identifying this as their home region.

Public four-year institutions of higher education were most highly represented in both the qualitative and quantitative phases of this study. Six of the interview participants were employed by public, four-year institutions. Sixty-four percent of survey respondents indicated they worked for a public four-year institution.

Developmental Approach to Advising

Frost (1991) described developmental advisement as a process through which purposeful, personal relationships are built and student development and goal exploration are encouraged. All of the advisors participating in the qualitative phase of this study described the importance of developing relationships with their students through the advisement process. Further, the advisors explained that these personal relationships serve as the foundation for helping students explore their goals, develop problem-solving and decision-making skills, and become partners in the advising relationship. All 12 of the advisors participating in the qualitative phase of this study affirmed Thomas and Chickering's (1984) assertion that a student's academic performance is related to his or her relationships, experiences, and development outside of class.

The advisors also indicated that they are able to empower students by providing them with information and resources necessary for success. This finding aligned with the assertion of Erlich and Russ-Eft (2011) that empowering students positively contributes to their self-efficacy and self-assurance, and thereby increases their likelihood of success. By providing students with pertinent information and connecting them with available resources, advisors contributed to student development and learning. Advisors' descriptions of their advisement practices complimented existing literature which has suggested that through an advisement process in which student learning and empowerment serve as primary foci, students become better equipped to make informed decisions and to play an active role in creating opportunities for their own academic success (Ramos, 1997).

Additionally, advisors participating in the qualitative phase of this study discussed the importance of appreciating and respecting the unique needs of each of the students they advise. The participants' comparisons of advising and assembling a puzzle complimented existing literature suggesting that developmental advisors follow a student-centered approach in which they focus on the unique needs, concerns, experiences, and goals of each student (Brown & Rivas, 1994; Crookston, 1972; Gordon, 1994; Tuttle, 2000). Specifically, the advisors revealed that they tailored their advisement practices to meet the specific interests, needs, strengths, and weaknesses of their students. This allowed them to help students create personalized opportunities for success which Brown and Rivas (1994) described as characteristic of effective advisement.

Over three-fourths of the 387 survey participants may be characterized as developmental advisors. Though these advisors were not asked specifically to identify their primary advisement style, they were asked to identify characteristics related to their advisement practices which were used to calculate an average score that was indicative of their primary advisement approach. These findings suggested that a large percentage of academic advisors, particularly those who provide advisement full-time, recognize that students gain new knowledge and develop new behaviors and skills through their relationships with their advisors (Astin, 1984: Drake, 2011; Metzner, 1989; Wilder, 1981).

Knowledge of Disability Law and Accommodation Requirements

Advisors who participated in the qualitative phase of the study revealed that they asked their advisees very specific questions to become familiar with the unique characteristics and needs of each. Each of the advisors explained that disability law assigns the responsibility of disclosure to the student. Further, advisors discussed the illegality of directly inquiring about a student's disability status. Additionally, these advisors demonstrated their knowledge of accommodation requirements and institutional disability support services through their descriptions of their advisement practices. Specifically, the advisors discussed the importance of immediately referring students who disclose a disability to the disability services office on campus where they may initiate the process of documenting their disability. The advisors reflected that students with disabilities need to provide documentation of their disabilities to the campus disability services office in order to request and arrange appropriate accommodations. Though the advisors discussed their knowledge of initiating the accommodations process, they did express a lack of familiarity with the types and specific requirements of reasonable accommodations. This finding, similar to those of Thompson et al. (1997) and Dona and Edmister (2001) suggested that advisors may possess limited knowledge of the specific requirements of reasonable accommodations.

Over half (59.4%) of survey respondents reported that they had not received training on the ADA (1990) or ADAAA (2008), while 33.3% indicated that they had not received training on available institutional disability resources. McLaughlin (1995) asserted that effectively meeting the needs of students with disabilities requires advisors

to receive training to distinguish and avoid illegal advisement practices, such as directly inquiring about a student's disability status. The finding that over half of survey respondents had not received training on two fundamental pieces of disability legislation identified an area of weakness that could diminish the effectiveness of student advisement, and increase the possibility of litigation. Further, more than half of the respondents indicated that they were either unprepared (38.5%) or unsure (17.3%) if they were adequately prepared to advise students with disabilities. These findings were consistent with Vasek's (2005) suggestion that many advisors possess limited knowledge of disability-related issues. Less than one-third (30.2%) of advisors participating in this survey selected the response that appropriately complied with disability law and accommodation requirements for at least nine of the 12 questions associated with the advisement scenarios. The majority (55%) of survey respondents selected appropriate responses for six to nine of the advisement scenario questions.

Relationship Between Advisor Status and Advisement Practices

A Chi-square test of independence was used to determine if advisement practices were independent of advisor status. Statistically significant dependences were found for advisor status and referrals of students with documented disabilities to the campus disability services office and asking specific questions to encourage disclosure. Full-time advisors would be more likely than part-time advisors to refer students with documented disabilities to the disability services office for disability documentation and accommodation processing. Full-time advisors would also be more likely than part-time advisors to ask specific questions to help encourage disability disclosure by a student

who reveals a history of academic difficulty in a specific area. These findings suggest that the singular role of full-time advisors may provide more time and opportunities for interacting with students, thereby increasing the likelihood of asking probing questions and making referrals to the disability services office. Further, these findings suggest that full-time advisors receive more comprehensive training on disability-related issues, disability law, and accommodation requirements, which better prepares these individuals to advise students with disabilities. This finding complements Mellblom and Hart's (1997) assertion that trainings designed to increase knowledge of disability-related issues, campus disability services, and commonly used accommodations enhance advisors' preparation for meeting the advisement needs of students with disabilities.

Relationship Between Institution Type and Advisement Practices

A Chi-square test of independence was used to determine if advisement practices are independent of institution type. Statistically significant dependences were found for institution type and referrals of students with documented disabilities to the campus disability services office. Standardized residuals revealed that a larger number of advisors at private four-year institutions than were expected would fail to refer students with documented disabilities to the campus disability services office. This finding suggests that these advisors may need to be provided with opportunities to enhance their knowledge of the accommodations process for students with disabilities. This is consistent with implications in the literature that students with disabilities in higher education would benefit from improvements in the knowledge of faculty and staff regarding disability-related issues (Park et al., 2012; Rao, 2004).

Relationship Between Advisement Type and Advisement Practices

A Chi-square test of independence was used to determine if advisement practices are independent of advisement type. Statistically significant dependences were found for advisement type and referrals of students with documented disabilities to the campus disability services office, asking specific questions to encourage disclosure, and referring students who do not disclose disabilities to appropriate campus resources. Standardized residuals revealed that a larger number of advisors who follow a prescriptive approach to advisement than were expected would fail to refer students with documented disabilities to the campus disability services office or would fail to ask specific questions to encourage disclosure. Standardized residuals also indicated that in some scenarios fewer prescriptive advisors than expected would refer students with documented disabilities to the disability services office. Further, standardized residuals indicated that more prescriptive advisors than were expected would fail to refer students who did not disclose disabilities to appropriate campus resources. These findings suggest that advisors who practice a prescriptive type of advisement may need to improve their knowledge of disability-related issues and the accommodations process. These findings compliment Scott and Gregg's (2000) assertion that advisors who enhance their understanding of accommodations and disability support services will more effectively meet the needs of students with disabilities in higher education.

Limitations

The qualitative phase of this study was limited to academic advisors, whether faculty or professional, who are employed by institutions of higher education in Alabama,

Louisiana, Mississippi, and Tennessee. The qualitative findings may not be generalizable to academic advisors in other regions of the United States.

The quantitative phase of this study was limited to academic advisors, whether faculty or professional, who received an email invitation to participate in the study. Invitations were disseminated through two NACADA listservs, 25 state academic advising association listservs, and disability services or student support offices at 300 institutions of higher education across the United States. Academic advisors who were not members of the advising association listservs or employees of the institutions receiving email invitations may not have been aware of or included in the study. The findings may not be generalizable to academic advisors who are not members of an academic advising association or provide disability or student support services.

This study may be limited by an overrepresentation of developmental advisors. Advisors who join advising associations and provide disability or student support services may be more committed to and invested in facilitating student success through academic advisement and, therefore, be more likely to follow a developmental approach. Conversely, developmental advisors may be more likely to join professional advising associations or seek employment providing advisement through disability or student support services because of their interest in contributing to the development and academic success of students. Advisors who participated in the qualitative phase of the study responded in the affirmative within 24 hours of receipt of an email invitation. The findings from the study may not be generalizable to advisors who do not follow a developmental approach.

Self-selection for inclusion in the qualitative phase of this study, evidenced by the advisors' prompt responses and willingness to participate in personal interviews may have been indicative of the advisors' general approach to advisement. This self-selection suggested a strong interest in the research topic and may have introduced inherent bias in the advisement characteristics of the participants which limits the generalizability of the findings.

This study may be limited by an overrepresentation of full-time advisors. Advisors who join advising associations and provide disability or student support services may be more likely to be characterized as professional advisors whose job responsibilities include full-time advisement. Historically, faculty advisors, who typically provide advisement as a part-time job function, have been responsible for providing academic advisement. However, Habley et al. (2012) reported that only 25% of institutions of higher education use a faculty-only model of advisement while 55% of colleges and universities use a shared model of advising in which students receive advisement from both faculty and full-time advisors. Self (2008) defined full-time professional advisors as those whose advisement practices focus primarily on promoting students' academic success with an additional emphasis on student development. Part-time faculty advisors who continue to be employed in the academic advisement process by most institutions of higher education, may have been underrepresented in this study. Therefore, the findings from the study may not be generalizable to part-time advisors.

Recommendations for Practice

Based on the findings of in this study, the follow practices are recommended:

1. Findings from this study have indicated that advisement practices related to students with disabilities may be dependent on advisor status. Specifically, practices of full-time advisors are more likely to reflect knowledge of disability law and accommodation requirements. Hiring more full-time professional advisors to provide academic advisement for students with disabilities may contribute to higher rates of student satisfaction, retention, and success.

2. Study findings revealed the possibility of a significant dependence of advisement practices for students with disabilities and advisement type. Prescriptive advisors are more likely to focus on course selection and scheduling and, therefore, may be less likely to become attuned to the needs of students with disabilities. Institutions of higher education might evaluate current practices of their advisors and develop strategies for connecting students with disabilities with advisors who follow a developmental or intrusive approach.

3. Knowledge of disability law and accommodation requirements is vital to ensuring institutional compliance with legislative mandates. While all institutional personnel may not have direct contact with students with disabilities in an advisory role, it would be advantageous for institutions of higher education to provide up-to-date education for all faculty and staff concerning disability-related issues to reduce the risk of unintentional noncompliance.

4. Advisors participating in the qualitative phase of this study indicated they were unfamiliar with available accommodations for students with disabilities. Higher education administrators might consider the development of a system for providing

general information and updates regarding the accommodations process, available accommodations, and institution-specific disability-related resources to faculty and staff.

Recommendations for Future Research

As a result of this study, the following recommendations for future research have been developed:

1. The qualitative research in this study pertained to one region of the southeastern United States. Conducting interviews with academic advisors from other geographical regions would provide additional information regarding current academic advisement practices throughout the United States and would potentially enhance the generalizability of the findings.

2. Developmental advisors may have been overrepresented in this study. Repeating the study with academic advisors who are not members of a national or state academic advising association and do not receive an invitation to participate in the study through a disability services or student support office would provide further information to characterize current academic advisement practices in American higher education and would potentially enhance the generalizability of the findings.

3. Full-time advisors may have been overrepresented in this study. Repeating the study with faculty advisors, who are more likely to be characterized as part-time, would allow a more detailed characterization of academic advisement practices in postsecondary education and would potentially enhance the generalizability of the findings.

4. Through the use of the *Postsecondary Academic Advisement Practices Questionnaire* (Appendix B), institutions of higher education could evaluate advisors'

knowledge of appropriate responses, as determined by disability law and accommodation requirements, to potential advisement scenarios involving students with disabilities.

5. Future studies should evaluate existing academic advisor training programs or workshops to identify effective strategies for incorporating detailed information pertaining to the unique needs of students with disabilities, disability law, and accommodation requirements.

6. Data collection for the 2012 National Longitudinal Transition Study sponsored by the U.S. Department of Education will continue through Spring 2014. Future research could compare the results of this study with the findings from the 2002 National Longitudinal Transition Study-2 to identify trends related to students with disabilities in higher education and determine if a higher percentage of these students have been receiving the accommodations necessary for increasing their likelihood of success.

The findings from this study provide cause for celebration and concern. The national sample in this study, comprised of academic advisors who may be predominantly characterized as full-time, generally ascribed to the tenets of developmental advisement which include developing relationships with students, appreciating the uniqueness of each student, helping students explore their goals, and empowering students to use new knowledge and available resources to create an academic environment in which they can be successful. Gordon (1988) suggested that developmental advisement provides the greatest opportunities for customizing education to meet the needs of postsecondary students. Through their use of a developmental approach to advisement, the advisors participating in this study may have tailored their

advisement practices to meet the needs of their students, thereby enhancing the students' connectedness with the campus community, and increasing the likelihood of their continued enrollment and ultimately, academic success.

The large representation of full-time advisors in this study may be indicative of concerted efforts in higher education to provide academic advisement that best meets the needs of the students. Traditionally, faculty have been responsible for advising postsecondary students. For most faculty, academic advisement represents a part-time responsibility included in their full-time job. According to Habley et al., (2012), the majority of postsecondary educational institutions no longer use a faculty-only model of advisement. Over half of American colleges and universities have recently employed an advising model in which both faculty and professional advisors provide academic advisement to students (Habley et al., 2012). This potential shift in postsecondary academic advising may contribute to enhanced educational, personal, and professional development of students.

Contrarily, the lack of training and preparation of some advisors related to advising students with disabilities suggests that the advisement needs of students with disabilities in institutions of higher education across the nation may be going unmet. Though these areas of weakness provide a focus for improvement strategies, enhancing advisement for students with disabilities will require commitment from both institutional administrators and advisors. Academic advisement represents one of the most valuable institutional tools available for increasing opportunities for student success (Andrews et al., 1987; Frost, 1993; Gordon, 1994; Heisserer & Parette, 2002; Knight, 2000). To be

effective, however, advisement for all students, including those with disabilities, should be used wisely and with caring and concern.

APPENDIX A

POSTSECONDARY ADVISEMENT PRACTICES FOR STUDENTS WITH DISABILITIES INTERVIEW GUIDE

Overview:

Thank you for agreeing to talk to me and share your experiences with me by participating in this interview. My name is Rebekah Young and I am currently collecting data for my dissertation which is focused on exploring faculty members' academic advisement practices, particularly as they pertain to undergraduate students with disabilities.

I am asking you to participate in this interview because of your experience providing academic advisement for undergraduate students with disabilities at your institution. Your willingness to share your experiences and perceptions will help me gain a better understanding of advisement practices pertaining to students with disabilities and the factors that influence these practices. I really appreciate you taking the time to share your insight and expertise.

Interview:

1. How long have you held your current faculty position or one similar to it?
2. How long have you been responsible for providing academic advisement to undergraduate students?
3. What changes, if any, have you made in your advisement practices during your career as a faculty member?
4. How much of your work time is dedicated to student advisement?
5. On average, how many undergraduate students do you advise each semester?
6. How would you describe your attitude towards student advisement?
7. What percentage of the students that you have advised had a disclosed disability?
8. Which type of disability (physical, emotional, mental, or learning) have you encountered most frequently in your advising experiences?
9. How did your responses to the students differ based on the type of disability?

10. How would you describe your comfort level when working with, and addressing the needs of, students with disabilities?

11. What specific advisement needs do you believe students with disabilities have?

12. How do you advise a student who you believe has a disability but has not disclosed it?

13. How do you advise a student who has a disclosed disability?

14. What are your strengths in advising students with disabilities?

15. What are your weaknesses in advising students with disabilities?

16. What are the most important aspects of advising students with disabilities?

17. How could you provide better, or more effective, advisement for students with disabilities?

18. If you were responsible for designing a program to train or prepare faculty members to effectively advise students with disabilities, what components would it include?

Closing:
Thank you very much for your time and your willingness to share your experiences and perceptions with me. I appreciate your willingness to participate in this study. Your information is invaluable. Thank you again.

APPENDIX B

ACADEMIC ADVISEMENT FOR STUDENTS WITH DISABILITIES

ADVISOR QUESTIONNAIRE

Advisor Awareness of Disability-Related Needs, Laws, and Accommodation Requirements in Postsecondary Academic Advisement Practices

Advising Role

1. **How would you best describe your role as advisor?**
   ☐ Faculty Advisor ☐ Academic Advisor/Counselor
   ☐ Other: _____

2. **How would you best describe the amount of work time you dedicate to student advisement?**
   ☐ Full-time ☐ Part-time

3. **How long have you held a position similar to your current one?**
   ☐ Less than 2 years ☐ 2-5 years ☐ 6-10 years ☐ 10-15 years
   ☐ More than 15 years

4. **How many students do you advise in an average week?**
   ☐ Less than 5 ☐ 5-10 ☐ 10-20 ☐ 20-30 ☐ 30-40 ☐ 40-50
   ☐ More than 50

5. **When do you typically provide advisement to your students?**
   ☐ During the specified advisement period each semester
   ☐ Any time a student asks for advisement
   ☐ Any time I believe a student needs advisement
   ☐ Other: _____

6. **Which of the following most closely represents your approach to advisement?**
   ☐ I help students select and schedule courses to ensure they continue to progress academically.
   ☐ I help students select and schedule courses and help them explore their personal, educational, and life goals.
   ☐ I help students select and schedule courses and help them explore their personal, educational, and life goals. I also seek out my students when I believe they are experiencing difficulty.

7. **In general, how familiar are you with your students?**
   ☐ Not very familiar: I typically use their ID number for advisement purposes.
   ☐ Somewhat familiar: I typically recognize their faces, but do not always remember their names.
   ☐ Familiar: I typically remember their names and basic information about them.
   ☐ Very familiar: I typically remember their names and what is going on with them.
   ☐ Familiar to very familiar: I typically remember all my students' names and details about their lives, but am more familiar with some than others.

8. **Which of the following best describes your view of the advisement process?**
   ☐ The advisor is responsible for telling students what is best for them and students are responsible for following the advisor's guidance.
   ☐ Advisors and students are responsible for working together to determine what is best for the student, but students should seek guidance when they need it.
   ☐ Advisors and students are responsible for working together to determine what is best for the student, but advisors should seek out those students who are struggling academically.

9. **What percentage of the students that you advise has some type of disability?**
   ☐ Less than 10% ☐ 10-25% ☐ 26-50% ☐ 51-75% ☐ 76-99%
   ☐ 100% ☐ Do not know

10. **What type of disability have you encountered most frequently in the students you advise?**
    ☐ Physical ☐ Learning ☐ Mental ☐ Emotional
    ☐ I have not encountered disability ☐ Do not know ☐ Other: _____

11. **How would you describe your comfort level when advising students with disabilities?**
    ☐ Very uncomfortable ☐ Somewhat uncomfortable ☐ Neutral
    ☐ Somewhat comfortable ☐ Very comfortable ☐ Do not know

12. **Do the advisement needs of students with disabilities differ from those of students without disabilities?**
    ☐ Yes ☐ No ☐ Do not know

Advisor Training

13. **During your postsecondary education, did you complete courses designed to address disability issues?**
    ☐ Yes ☐ No ☐ Do not know

14. Did preparation for your role as an advisor include training on the requirements of the Americans with Disabilities Act (ADA) or ADA Amendments Act (ADAAA)?
☐ Yes ☐ No ☐ Do not know

15. Did preparation for your role as an advisor include training on advising students with disabilities?
☐ Yes ☐ No ☐ Do not know

16. Did preparation for your role as an advisor include training on available institutional disability services?
☐ Yes ☐ No ☐ Do not know

17. Has the training/preparation you received adequately prepared you for advising students?
☐ Yes ☐ No ☐ Do not know

18. Has the training/preparation you received adequately prepared you for advising students with disabilities?
☐ Yes ☐ No ☐ Do not know

Institutional Information

19. How would you best describe your institution?
☐ Public ☐ Private (nonprofit) ☐ Proprietary (for profit)

20. Which of the following best describes your institution?
☐ Four-year ☐ Two-year

21. What is the highest degree granted by your institution?
☐ Associate's Degree ☐ Bachelor's Degree
☐ Master's Degree ☐ Specialist Degree
☐ PhD, EdD, or professional degree (i.e. MD, JD, DDS, etc)
☐ Other: _____

22. What is the student enrollment at your institution?
☐ Less than 2,500 ☐ 2,501-4,999 ☐ 5,000-9,999
☐ 10,000-19,999 ☐ 20,000-29,999 ☐ 30,000-39,999
☐ 40,000 or more

23. In what geographical region is your institution located?
☐ Region I: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
☐ Region II: New Jersey, New York, Puerto Rico, Virgin Islands

☐ Region III: Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia
☐ Region IV: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee
☐ Region V: Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin
☐ Region VI: Arkansas, Louisiana, New Mexico, Oklahoma, Texas
☐ Region VII: Iowa, Kansas, Missouri, Nebraska
☐ Region VIII: Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming
☐ Region IX: Arizona, California, Hawaii, Nevada
☐ Region X: Alaska, Idaho, Oregon, Washington

Demographic Information

24. Gender:
☐ Male ☐ Female

25. Age:
☐ Under 25 ☐ 25-29 ☐ 30-39 ☐ 40-49 ☐ 50-59
☐ 60-64 ☐ Over 65

26. Race/Ethnicity:
☐ African American ☐ American Indian or Alaska Native
☐ Asian/Pacific Islander ☐ Caucasian ☐ Spanish/Hispanic/Latino
☐ Other: _____

27. Highest Degree Earned:
☐ Associate's ☐ Bachelor's ☐ Master's ☐ Specialist
☐ PhD or Ed.D.
☐ Other: _____

28. Current Salary:
☐ Less than $22,050 ☐ $22,050-$29,999 ☐ $30,000-$39,999
☐ $40,000-$49,999 ☐ $50,000-$59,999 ☐ $60,000-$69,999
☐ $70,000-$79,999 ☐ $80,000-$89,999
☐ $90,000-$99,999 ☐ $100,000 or more

29. Which of the following best describes your experience with disability?
☐ I have a disability.
☐ I have family members/friends with a disability.
☐ I have no experience with disability.
☐ I prefer not to answer.

Advisement Scenarios
After watching each vignette, please select the statement that most accurately reflects what you would do in a similar situation.

Scenario #1: *Adeleigh has a learning disability that necessitates taped books and readers for exams. She is interested in studying abroad, but believes she will be unable to do so because of her accommodations.*

30. Which of the following most closely represents how you would respond to Adeleigh?

☐ I will work with the director of the study abroad programs to determine if arrangements could be made to provide taped books and readers for you so that you can study.
☐ Have you spoken with the director of the study abroad programs about this?
☐ I am sorry, but there is nothing I can do to help.
☐ Have you contacted the office of disability services here on campus? They may be able to help.

31. Which of the following statements most closely relates to your thoughts about Adeleigh's situation?

☐ Since Adeleigh says she has a learning disability, as her advisor, I must ensure that she receives taped books and readers.
☐ Adeleigh can participate in the study abroad program, but will be exempted from the required reading and exams because of her disability.
☐ Adeleigh may receive appropriate accommodations if she contacts the office of disability services and tells them she has a learning disability.
☐ Adeleigh may receive appropriate accommodations if she contacts the office of disability services and provides documentation of her disability.

Scenario #2: Dinorah is an international student enrolled in four reading and writing intensive courses. She is having difficulty completing class assignments and during a conversation with you reveals she has dyslexia.

32. Which of the following statements most closely represents your thoughts about this situation?

☐ Since Dinorah is not an American student, she is not eligible for disability accommodations.
☐ Dinorah's difficulty is probably a result of a language barrier and not dyslexia.
☐ Even though Dinorah is an international student, if she provides documentation of her dyslexia, she will be eligible for disability accommodations.
☐ The institutional disability services office will not accept foreign documentation of disabilities.

33. What recommendation would you most likely make to Dinorah?

☐ Contact your professors and ask if more time could be allowed for you to complete exams and in-class exercises.

☐ Contact the student support services office and inquire about available campus learning assistance.

☐ Contact the disabilities service office to determine if you qualify for accommodations and assistance that may be helpful.

☐ Drop the class that poses the greatest challenge so you can focus your attention on the others.

Scenario #3: *Rick is struggling in college algebra. He was unsuccessful in his first attempt to complete the course and is retaking it this semester. He meets with you to discuss dropping the course and reveals he has always struggled with math.*

34. Upon learning that Rick struggled with math throughout his K-12 education, which of the following most closely represents how you might respond?

☐ I think you might have a learning disability.

☐ Have you ever sought tutoring or some type of assistance?

☐ Have you considered changing your major?

☐ You have to take this course because it is required.

35. If, later in your conversation, Rick reveals that he received math tutoring in high school through an IEP (individualized education plan), which of the following statements most closely represents how you would respond?

☐ What type of disability do you have?

☐ Have you spoken with anyone here at the institution about this?

☐ What other accommodations did you receive in high school?

☐ What other accommodations would be helpful for you?

36. After learning that Kyle had an IEP in high school, you recommend that he contact the institution's disability services office. Kyle asks, "Why should I?" Which of the following most closely represents how you would respond?

☐ They can make you successful.

☐ You have a disability and need extra help.

☐ They may be able to help you make arrangements for accommodations like you had in high school.

☐ If you are enrolled in college, federal laws require you to disclose any disability you may have.

Scenario #4: *Jade is a student in one of the required composition courses that you teach and you have noticed that she is having difficulty with the writing assignments. During a conversation with her, she explains that writing has always been hard for her but discloses nothing more.*

37. Which of the following most closely represents what you would say to Jade if you were trying to provide her an opportunity to disclose a disability?

☐ Have you ever been diagnosed with a learning disability?
☐ Have you visited the writing center and student support services on campus?
☐ Have you ever received special services like tutoring or individual assistance?
☐ Have you considered being tested for a learning disability?

38. Jade has chosen not to disclose her disability, but you want to help her succeed in her composition class. Which of the following most closely represents what you would do in this situation?

☐ Speak to other professors about your suspicion that she has an undisclosed disability and ask for their suggestions regarding how to help her.
☐ Encourage her to be tested for a learning disability.
☐ Explain to her that you suspect she has a disability and encourage her to disclose it.
☐ Encourage her to seek assistance from the writing center and student support services.

Scenario #5: John Paul is on campus for a preview session and has come to your office for his first advisement appointment. He is in a wheelchair and indicates that plans to major in Chemistry.

39. Which of the following most closely represents how you would respond to John Paul?

☐ There are a lot of lab requirements for chemistry majors.
☐ Working at a lab bench may be difficult because of your disability.
☐ Do you have a strong background in science?
☐ The disability services office on campus can help you arrange appropriate accommodations.

40. If later in the conversation, John Paul reveals that he will be living in campus housing and inquires about the process of requesting a personal care aide, how would you most likely respond?

☐ The disability services office on campus will set up those accommodations for you.
☐ Personal care aides do not fall within the scope of accommodations provided by the institution, but the disability services office may be able to provide you with contact information for local agencies that provide those services.

☐ The admissions office should have notified you of the institution's accommodations policies.
☐ Since you will be living on campus, you should contact the residence life office to request those accommodations.

Scenario #6: Taylor has been your advisee for two years and has a disclosed, documented visual impairment. She wants to change her major to computer programming.

41. Which of the following most closely represents how you would respond to Taylor's decision?

☐ You may want to reconsider your decision because of your visual impairment.
☐ If you choose to change your major to computer programming, accommodations might be necessary to help you read computer screens.
☐ It will be very difficult for you to fulfill the requirements of the computer programming degree.
☐ You should talk to the chair of the computer programming department and determine if that program is a good fit for you.

APPENDIX C

VIDEO VIGNETTES SCRIPT

Scenario #1

Advisor: Hey _____! Come on in. How are things going?

Student: Hey! This semester is going really well. Being able to use the audio books has really helped a lot. And having a reader for my exams has made a big difference!

Advisor: I am so glad to hear that!

Student: I heard some of my classmates talking about the new study abroad program last week. It sounds awesome.

Advisor: It does sound awesome! I think it's a great opportunity for students.

Student: I would really like to go, but I can't because of my accommodations.

Scenario #2

Student: Hi Dr. _____. Thank you for making time to see me.

Advisor: I'm glad to help. You sounded a little upset on the phone earlier. What's going on?

Student: I can't do this anymore! I've got to drop some of these classes before the drop date. I just can't get all this work done!

Advisor: What's giving you the most trouble?

Student: There's so much reading! And I have at least two papers due every week. I should have known this would be too much.

Advisor: Why do you say that?

Student: Reading and writing have always been hard for me. I have dyslexia, but I thought I could handle it.

Scenario #3

Student: Hey Mr./Mrs. _____. I know I don't have an appointment, but do you have a few minutes?

Advisor: Sure, _____. Is everything okay?

Student: Not really. I'm failing my algebra class. I think I should drop it.

Advisor: Well, _____ it is still early in the semester. Can you tell me what's going on in class?

Student: I took this class last semester and got an F. And then I failed the first test last week. It's going to be just like last time. I have never been good at math. Even in high school, it was my worst subject.

Scenario #4

Advisor: Hi _____. Thanks for coming by. I've noticed that you seem to be having difficulty with the writing assignments in class.

Student: I'm trying, but I've never been a good writer. My ideas sound so much better in my head than they do on paper.

Advisor: That happens to me sometimes too. But, I'm worried about you. This is a required composition course, so there is going to be a lot of writing. What part of writing gives you the most trouble?

Student: I don't know! All of it is hard. I have an idea in my head, but when I write the paper, it comes out completely wrong. I don't know what it is! I've always been a bad writer and I can't do anything about it.

Scenario #5

Advisor: Hi _____. I'm Dr. _____. It's nice to meet you. How have you enjoyed the preview session?

Student: It's nice to meet you too. Preview's been okay. There's just so much information! But, everyone has been nice and I really like the campus.

Advisor: It can be a lot to take in! We have a great campus. I think you'll really like it here. So, let's talk about planning your schedule for your first semester. What are you planning to major in?

Student: Chemistry.

Scenario #6

Advisor: Hey _____! How's it going?

Student: Things are great. This year has been so much better than last year.

Advisor: That is wonderful! Freshman year can be tough, but you stuck it out. I'm proud of you.

Student: Thanks! And thank you for telling me about the disability services office. They really helped me.

Advisor: I'm so glad!

Student: So, I hope you're not disappointed in me, but I came by to talk to you about changing my major to computer programming.

APPENDIX D

ADVISEMENT SCENARIO VIDEO VIGNETTE SCREENSHOTS

Advisement Scenario #1

Advisement Scenario #2

Advisement Scenario #3

Advisement Scenario #4

Advisement Scenario #5

Advisement Scenario #6

APPENDIX E

INFORMED CONSENT FOR SURVEY PARTICIPANTS

Purpose

The purpose of this research study is to explore the characteristics of academic advisement practices in higher education, specifically as they relate to students with disabilities. The research will also examine the influence of advisors' awareness of disability-related needs, laws, and accommodation requirements on academic advisement practices.

Description

You are being asked to complete a web-based questionnaire developed by a doctoral candidate conducting research for her dissertation. It should take approximately 15 minutes to complete. By clicking "I agree," you are giving consent to participate in this study. You will not be asked to provide any personal identifiers.

Risks

Participation in this study is completely voluntary. Foreseeable psychological, social or physical risks expected as a result of participating in this study are nonexistent to minimal. It is possible that certain questions may make you feel frustrated, concerned, or unhappy. You may withdraw from participating in this study at any time during the process without penalty or other consequence. All data will be kept strictly anonymous. All information inadvertently obtained during the course of this research study will also remain anonymous.

Confidentiality Alternative Procedures

As a participant in this research study, your anonymity is important. Only group information, with no personal information, will be presented in fulfillment of degree requirements and at scientific meetings and/or published in journals. All written notes and data files will be stored in a locked file box at the home of the researcher. Data files will be destroyed after the study is completed.

Subjects Assurance

Your participation in this study is completely voluntary. You may decline to answer any questions that make you uncomfortable, and you may withdraw at any time without penalty. All information gathered during this process will be kept confidential. All data files gathered during this study will be destroyed when the study is completed.

Contact Persons

Questions concerning this research should be directed to Rebekah Young at (601) 266-5388. This study and consent form have been reviewed by The University of Southern Mississippi's Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the Administrator of the Institutional Review Board at The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406, (601) 266-5997.

Legal Rights

This consent form is a copy of your legal rights. By clicking "I agree," you are giving your consent to serve as a research participant in this study. You are not waiving any legal rights by participating in this survey.

APPENDIX F

INVITATION TO PARTICIPATE IN INTERVIEW

Dear Sir/Madam,

I am a doctoral candidate researching the influence of advisor knowledge of disability-related needs, laws, and accommodation requirements on academic advisement practices. I would like to invite you to participate in an interview that explores faculty members' academic advisement practices as they pertain to undergraduate students with disabilities. This interview should take approximately 60 minutes to complete.

I have successfully defended my dissertation proposal and am currently conducting the qualitative research phase of the study. Information obtained during this first, qualitative, phase will inform an instrument to be used in a second, quantitative phase of data collection. All data collected during this study will be combined and analyzed. Results of this study will be compiled and utilized to prepare my final dissertation document. A final copy of the dissertation will be submitted to my dissertation committee members, Drs. Lilian Hill, Richard Mohn, Thelma Roberson, and Kyna Shelley, as well as the Graduate School at The University of Southern Mississippi in partial fulfillment of the requirements for the degree of Doctor of Philosophy. Results of the study may be submitted for presentation or publication. Only pseudonyms will be used to refer to individuals and no personally identifying information will be revealed.

When we meet, an informed consent document will be provided to you and explained. You and I will both sign it, and a copy will be left with you.

If you have any questions or want to further discuss this project, please feel free to contact me. Contact information is provided below.

Rebekah Young: (601) 266-5388; rebekah.young@ usm.edu

Sincerely,

Rebekah Young

APPENDIX G

INFORMED CONSENT FOR INTERVIEW PARTICIPANTS

Purpose

The purpose of this research study is to explore the influence of advisors' awareness of disability-related needs, laws, and accommodation requirements on academic advisement practices.

Description

You are being asked to participate in a personal interview facilitated by doctoral candidate conducting research for her dissertation. It should take 60 minutes to complete. By agreeing to participate in, and scheduling an interview, you are giving consent to participate in this study. Neither interview participants nor their respective institutions will be identified.

Risks

Participation in this study is completely voluntary. Foreseeable psychological, social or physical risks expected as a result of participating in this study are minimal. Certain questions may make you feel frustrated, concerned, or unhappy. You may withdraw from participating in this study at any time during the process without penalty or other consequence. All data will be kept strictly confidential. The researcher will not identify any participant or employing institution by name. All information inadvertently obtained during the course of this research study will remain confidential. Transcriptions of the interviews may be kept for a period of 18 months to facilitate data analysis, however, no personally identifying information will be recorded on the transcriptions and only pseudonyms will be used to refer to individual participants.

Confidentiality Alternative Procedures

As a participant in this research study, your confidentiality is important. Only group information, with no personal information, will be presented in fulfillment of degree requirements and at scientific meetings and/or published in journals. The researcher will not identify any participant by name in reports written about the discussion. All written notes, audiotapes, and transcribed taped information will be stored in a locked file box at the home of the researcher. The audio-taped interviews, original interview transcriptions, and written notes will be destroyed after the study is completed.

Subjects Assurance

Your participation in this study is completely voluntary. You may decline to answer any questions that make you uncomfortable, and you may withdraw at any time without penalty. All information gathered during this process will be kept confidential. All audio recordings of the interviews will be destroyed upon completion of the study. The information gathered will be kept confidential along with your identity. All information will be destroyed when the study is completed.

Contact Persons

Questions concerning this research should be directed to Rebekah Young at (601) 266-5388. This study and consent form have been reviewed by The University of Southern Mississippi's Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the Administrator of the Institutional Review Board at The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406, (601) 266-5997.

Legal Rights

This consent form is a copy of your legal rights. Your signature below indicates that you agree to participate in this study. By agreeing to participate in and scheduling an interview, you are giving consent as a research participant in this study. You are not waiving any legal rights by participating in this interview.

_____ _____

Signature of the Research Subject Date

_____ _____

Signature of Person Explaining the Study Date

APPENDIX H

INVITATION TO PARTICIPATE IN SURVEY

Dear Sir/Madam,

I am a doctoral candidate at The University of Southern Mississippi researching academic advisement as it relates to students with disabilities in higher education. I would like to invite you to participate in a web-based survey that explores faculty members' academic advisement practices as they pertain to undergraduate students with disabilities. The survey instrument is available at www.addresstbd.com and will be active through September 7, 2013. This questionnaire should not take more than 15 minutes to complete.

I have successfully defended my dissertation proposal and am currently conducting the quantitative research phase of the study. All data collected during this study will be combined and analyzed. Results of this study will be compiled and utilized to prepare my final dissertation document. A final copy of the dissertation will be submitted to my dissertation committee members, Drs. Lilian Hill, Richard Mohn, Thelma Roberson, and Kyna Shelley, as well as the Graduate School at The University of Southern Mississippi in partial fulfillment of the requirements for the degree of Doctor of Philosophy. Results of the study may be submitted for presentation or publication. No personally identifying information is requested on the questionnaire.

A copy of the informed consent form is found at www.addresstbd.com. By clicking on "I agree" at the bottom of the consent form, you are giving your consent to participate in this study and will gain access to the questionnaire.

If you have any questions or want to further discuss this project, please feel free to contact me at rebekah.young@usm.edu or (601) 266-5388.

Thank you for your time and your consideration.

Sincerely,

Rebekah Young

APPENDIX I

KEY TO APPROPRIATE RESPONSES

Scenario #1: *Adeleigh has a learning disability that necessitates taped books and readers for exams. She is interested in studying abroad, but believes she will be unable to do so because of her accommodations.*	**Which of the following most closely represents how you would respond to Adeleigh?** ☐ I will work with the director of the study abroad programs to determine if arrangements could be made to provide taped books and readers for you so that you can study. ☐ Have you spoken with the director of the study abroad programs about this? ☐ I am sorry, but there is nothing I can do to help. ☑ **Have you contacted the office of disability services here on campus? They may be able to help.** **Which of the following statements most closely relates to your thoughts about Adeleigh's situation?** ☐ Since Adeleigh says she has a learning disability, as her advisor, I must ensure that she receives taped books and readers. ☐ Adeleigh can participate in the study abroad program, but will be exempted from the required reading and exams because of her disability. ☐ Adeleigh may receive appropriate accommodations if she contacts the office of disability services and tells them she has a learning disability. ☑ **Adeleigh may receive appropriate accommodations if she contacts the office of disability services and provides documentation of her disability.**
Scenario #2: *Dinorah is an international student enrolled in four reading and writing intensive courses. She is having difficulty completing class assignments and during a conversation with you reveals she has dyslexia*	**Which of the following statements most closely represents your thoughts about this situation?** ☐ Since Dinorah is not an American student, she is not eligible for disability accommodations. ☐ Dinorah's difficulty is probably a result of a language barrier and not dyslexia. ☑ **Even though Dinorah is an international student, if she provides documentation of her dyslexia, she will be eligible for disability accommodations.** ☐ The institutional disability services office will not accept foreign documentation of disabilities. **What recommendation would you most likely make to Dinorah?** ☐ Contact your professors and ask if more time could be allowed for you to complete exams and in-class exercises. ☐ Contact the student support services office and inquire about available campus learning assistance. ☑ **Contact the disabilities service office to determine if you qualify for accommodations and assistance that may be helpful.** ☐ Drop the class that poses the greatest challenge so you can focus your attention on the others.

Scenario #3: *Rick is struggling in college algebra. He was unsuccessful in his first attempt to complete the course and is retaking it this semester. He meets with you to discuss dropping the course and reveals he has always struggled with math.*	**Upon learning that Rick struggled with math throughout his K-12 education, which of the following most closely represents how you might respond?** ☐ I think you might have a learning disability. ☑ Have you ever sought tutoring or some type of assistance? ☐ Have you considered changing your major? ☐ You have to take this course because it is required. **If, later in your conversation, Rick reveals that he received math tutoring in high school through an IEP (individualized education plan), which of the following statements most closely represents how you would respond?** ☐ What type of disability do you have? ☐ Have you spoken with anyone here at the institution about this? ☑ What other accommodations did you receive in high school? ☐ What other accommodations would be helpful for you? **After learning that Rick had an IEP in high school, you recommend that he contact the institution's disability services office. Rick asks, "Why should I?" Which of the following most closely represents how you would respond?** ☐ They can make you successful. ☐ You have a disability and need extra help. ☑ They may be able to help you make arrangements for accommodations like you had in high school. ☐ If you are enrolled in college, federal laws require you to disclose any disability you may have.
Scenario #4: *Jade is a student in one of the required composition courses that you teach and you have noticed that she is having difficulty with the writing assignments. During a conversation with her, she explains that writing has always been hard for her but discloses nothing more.*	**Which of the following most closely represents what you would say to Jade if you were trying to provide her an opportunity to disclose a disability?** ☐ Have you ever been diagnosed with a learning disability? ☐ Have you visited the writing center and student support services on campus? ☑ Have you ever received special services like tutoring or individual assistance? ☐ Have you considered being tested for a learning disability? **Jade has chosen not to disclose her disability, but you want to help her succeed in her composition class. Which of the following most closely represents what you would do in this situation?** ☐ Speak to other professors about your suspicion that she has an undisclosed disability and ask for their suggestions regarding how to help her. ☐ Encourage her to be tested for a learning disability. ☐ Explain to her that you suspect she has a disability and encourage her to disclose it. ☑ Encourage her to seek assistance from the writing center and student support services.

***Scenario #5**: John Paul is on campus for a preview session and has come to your office for his first advisement appointment. He is in a wheelchair and indicates that he plans to major in Chemistry.*	**Which of the following most closely represents how you would respond to John Paul?** ☐ There are a lot of lab requirements for chemistry majors. ☐ Working at a lab bench may be difficult because of your disability. ☐ Do you have a strong background in science? ☑ We have resources on campus to help you arrange appropriate accommodations. **If later in the conversation, John Paul reveals that he will be living in campus housing and inquires about the process of requesting a personal care aide, how would you most likely respond?** ☐ The disability services office on campus will set up those accommodations for you. ☑ Personal care aides do not fall within the scope of accommodations provided by the institution, but the disability services office may be able to provide you with contact information for local agencies that provide those services. ☐ The admissions office should have notified you of the institution's accommodations policies. ☐ Since you will be living on campus, you should contact the residence life office to request those accommodations.
***Scenario #6**: Taylor has been your advisee for two years and has a disclosed, documented visual impairment. She wants to change her major to computer programming.*	**Which of the following most closely represents how you would respond to Taylor's decision?** ☐ You may want to reconsider your decision because of your visual impairment. ☑ If you choose to change your major to computer programming, accommodations might be necessary to help you read computer screens. ☐ It will be very difficult for you to fulfill the requirements of the computer programming degree. ☐ You should talk to the chair of the computer programming department and determine if that program is a good fit for you.

APPENDIX J

IRB APPROVAL

THE UNIVERSITY OF
SOUTHERN MISSISSIPPI

INSTITUTIONAL REVIEW BOARD
118 College Drive #5147 | Hattiesburg, MS 39406-0001
Phone: 601.266.6820 | Fax: 601.266.4377 | www.usm.edu/irb

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
  Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: **13070201**
PROJECT TITLE: **Advisor Awareness of Disability-Related Needs, Laws, and Accomodation Requirements in Postsecondary Academic Advisement Practices**
PROJECT TYPE: **Dissertation**
RESEARCHER(S): **Rebekah Young**
COLLEGE/DIVISION: **College of Education and Psychology**
DEPARTMENT: **Educational Studies and Research**
FUNDING AGENCY/SPONSOR: **N/A**
IRB COMMITTEE ACTION: **Exempt Approval**
PERIOD OF APPROVAL: **07/15/2013 to 07/14/2014**

Lawrence A. Hosman, Ph.D.
Institutional Review Board

APPENDIX K

RATIONALE FOR APPROPRIATE ADVISEMENT SCENARIO RESPONSES

Appropriate Response	Rationale
Scenario 1, Question 30	
Have you contacted the office of disability services here on campus? They may be able to help.	In accordance with ADA and ADAAA, institutions of higher education are legally required to have at least one designated employee responsible for ensuring compliance with disability legislation. Generally, this individual works within the institutional disability services office which helps arrange accommodations for students with documented disabilities.
Scenario 1, Question 31	
Adeleigh may receive appropriate accommodations if she contacts the office of disability services and provides documentation of her disability.	In accordance with Section 504, ADA, and ADAAA, students may not be discriminated against on the basis of disability. Students cannot legally be denied participation in the study abroad program because of a disability. This student has already disclosed and documented her disability because she reveals that she uses taped books and readers for exams.
Scenario 2, Question 32	
Even though Dinorah is an international student, if she provides documentation of her dyslexia, she will be eligible for disability accommodations.	In accordance with Section 504, ADA, and ADAAA, the provision of accommodations for students in higher education requires documentation verifying the extent and nature of the substantial limitations on at least one of a student's major life activities. In order to qualify for accommodations, a student must provide documentation of his or her disability.
Scenario 2, Question 33	
Contact the disabilities service office to determine if you qualify for accommodations and assistance that may be helpful.	In accordance with Section 504, ADA, and ADAAA, the provision of accommodations for students in higher education requires documentation verifying the extent and nature of the substantial limitations on at least one of a student's major life activities. In order to qualify for accommodations, a student must provide documentation of his or her disability.

Scenario 3, Question 34	
Have you ever sought tutoring or some type of assistance?	According to Section 504, ADA, and ADAAA, it is illegal to discriminate against an individual on the basis of disability; therefore, it is illegal for representatives of institutions of higher education to inquire about a student's disability status. If a disability is suspected, questions may be asked to provide opportunities for disability disclosure.
Scenario 3, Question 35	
What other accommodations did you receive in high school?	Once a student has disclosed a disability, it is permissible to ask questions that will provide disability-related information that may be helpful in documenting that student's disability and arranging appropriate accommodations.
Scenario 3, Question 36	
They may be able to help you make arrangements for accommodations like you had in high school.	In accordance with ADA and ADAAA, institutions of higher education are legally required to have at least one employee designated to ensure compliance with disability legislation. Generally, this individual works within the institutional disability services office which helps arrange accommodations for students with documented disabilities.
Scenario 4, Question 37	
Have you ever received special services like tutoring or individual assistance?	According to Section 504, ADA, and ADAAA, it is illegal to discriminate against an individual on the basis of disability; therefore, it is illegal for representatives of institutions of higher education to inquire about a student's disability status. If a disability is suspected, questions may be asked to provide opportunities for disability disclosure.
Scenario 4, Question 38	
Encourage her to seek assistance from the writing center and student support services.	According to Section 504, ADA, and ADAAA, it is illegal to inquire or make judgments about a student's disability status. If a student does not disclose a disability, it is appropriate to refer the student to general support services on campus.

Scenario 5, Question 39	
The disability services office on campus can help you arrange appropriate accommodations.	In accordance with ADA and ADAAA, institutions of higher education are legally required to have at least one employee designated to ensure compliance with disability legislation. Generally, this individual works within the institutional disability services office which helps arrange accommodations for students with documented disabilities.
Scenario 5, Question 40	
Personal care aides do not fall within the scope of accommodations provided by the institution, but the disability services office may be able to provide you with contact information for local agencies that provide those services.	In accordance with ADA and ADAAA, institutions of higher education are required to provide reasonable accommodations to students with documented disabilities. These accommodations are designed to create equitable opportunities for students with disabilities to achieve academic success without lowering academic standards, altering program requirements, or creating an excessive financial burden for the institution.
Scenario 6, Question 41	
If you choose to change your major to computer programming, accommodations might be necessary to help you read computer screens.	According to Section 504, ADA, and ADAAA, it is illegal to discriminate against a student on the basis of disability. Students with disabilities should be made aware of the expectations and requirements associated with their chosen field of study, but should not be steered away from a specific major based solely on their disabilities.

REFERENCES

Abelman, R., & Molina, A. (2002). Style over substance reconsidered: Intrusive intervention and at-risk students with learning disabilities. *NACADA Journal, 22*(2), 66-77.

Allen, J. M., & Smith, C. L. (2008). Importance of, responsbility for, and satisfaction with academic advising: A faculty perspective. *Journal of College Student Development, 49*(5), 397-411. doi: 10.1353/csd.0.0033

Altman, B. M. (1981). Studies of attitudes toward the handicapped: The need for a new direction. *Social Problems, 28*(3), 321-337.

Americans with Disabilities Act (ADA) of 1990, Pub. L. No. 101-336, 104 Stat. 328.

Americans with Disabilities Act Amendments Act (ADAAA) of 2008, Pub. L. No. 110-325, 122 Stat. 3553, 3554, 3555, 3556, 3557, 3558, & 3559.

Andrews, M., Andrews, D., Long, E., & Henton, J. (1987). Student characteristics as predictors of perceived academic advising needs. *Journal of College Student Personnel, 28*(1), 60-65.

Astin, A. W. (1971). *Predicting academic performance in college; Selectivity data in 2300 American colleges.* New York, NY: Free Press.

Astin, A. W. (1984). Student involvement: A development theory for higher education. *Journal of College Student Personnel, 25*, 298-307.

Bachus, D. (1989). Centralized intrusive advising and undergraduate retention. *NACADA Journal, 9*, 39-45.

Baker, K. Q., Boland, K., & Nowik, C. M. (2012). A campus survey of faculty and student perceptions of persons with disabilities. *Journal of Postsecondary Education and Disability, 25*(4), 309-329.

Bandura, A. (1977a). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215.

Bandura, A. (1977b). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A., & Cervone, D. (1983). Self-evaluative and self-efficacy mechanisms governing the motivational effects of goal systems. *Journal of Personality and Social Psychology, 45*, 1017-1028.

Barga, N. K. (1996). Students with learning disabilities in education: Managing a disability. *Journal of Learning Disabilities, 29*(4), 413-421.

Barnard-Brak, L., Davis, T., Tate, A., & Sulak, T. (2009). Attitudes as a predictor of college students requesting accommodations. *Journal of Vocational Rehabilitation, 31*, 189-198.

Barnard-Brak, L, Lan, W. Y., & Lechtenberger, D. (2010). Accommodation strategies for college students with disabilities. *The Qualitative Report, 15*(2), 411-429.

Beal, P.E., & Noel, L. (1980). *What works in students retention*. Iowa City, IA: The American College Testing Program.

Beecher, M. E., Rabe, R. A., & Wilder, L. K. (1994). Practical guidelines for counseling students with disabilities. *Journal of College Counseling, 7*, 83-89.

Beilke, J. R., & Yssel, N. (1999). The chilly climate for students with disabilities in higher education. *College Student Journal, 33*(3), 364-371.

Berdie, R. F. (1967). The university is a many faceted-thing. *Personnel and Guidance Journal, 45*, 269-277.

Bigaj, S. J., Shaw, S. F., & McGuire, J. M. (1999). Community-technical college faculty willingness to use and self-reported use of accommodation strategies for students with learning disabilities. *Journal for Vocational Special Needs Education, 21*, 3-14.

Black, R., Smith, G., Harding, T., & Stodden, R. A. (2002). Provision of educational supports to students with disabilities in two year postsecondary programs. *Journal for Vocational Special Needs Education, 24*, 3-17.

Brinckerhoff, L. C. (1993). Self-advocacy: A critical skill for college students with learning disabilities. *Journal of School and Community Health, 16*(3), 23-33.

Brinckerhoff, L. C. (1996). Making the transition to higher education: Opportunities for student empowerment. *Journal of Learning Disabilities, 29*(2), 118-136.

Brinckerhoff, L. C., McGuire, J. M, & Shaw, S. F. (2002). *Postsecondary education and transition for students with learning disabilities* (2nd ed.). Austin, TX: PRO-ED.

Brinckerhoff, L. C., Shaw, S., & McGuire, J. M. (1993). *Promoting postsecondary education for students with L.D.* Austin, TX: PRO-ED.

Brinckerhoff, L. C., Shaw, S. F., & McGuire, J. (2001). Promoting access, accommodations, and independence for college students with learning disabilities. *Journal of Learning Disabilities, 25*(7), 417-429.

Brown, S. G. (1862). *The works of Rufus Choate, with a memoir of his life.* Boston, MA: Little, Brown, and Company.

Brown, T., & Rivas, M. (1994). The prescriptive relationship in academic advising as an appropriate developmental intervention with multicultural populations. *NACADA Journal, 14*(2), 108-111.

Burgstahler, S., Crawford, L., & Acosta, J. (2001). Transition from two-year to four-year institutions for students with disabilities. *Disability Studies Quarterly, 21*(1). Retrieved from http://dsq-sds.org/article/view/253/255

Chickering, A. W. (2006). Every student can learn-If…. *About Campus, 11*(2), 9-15.

Christensen, C. (2008). The employment of part-time faculty at community colleges. *New Directions for Higher Education, 143*, 29-36. doi: 10.1002/he.310

Coalition on the Academic Workforce. (2012). *A portrait of part-time faculty members: A summary of findings on part-time faculty respondents to the coalition on the academic workforce survey of contingent faculty members and instructors.* Retrieved from Academic Workforce website: http://www.academicworkfovce.org/CAW_portrait_2012.pdf

Cox, D. H., & Klas, L. D. (1996). Students with learning disabilities in Canadian colleges and universities: A primer for service provision. *Journal of Learning Disabilities, 29*(1), 93-97.

Creamer, D. G. (2000). Use of theory in academic advising. In V. N. Gordon & W. R. Habley (Eds.), *Academic advising: A comprehensive handbook* (pp. 18-34). San Francisco, CA: Jossey-Bass.

Creswell, J. W. (2007). *Qualitative inquiry and research design*. Thousand Oaks, CA: Sage Publications.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative approaches to research* (4th ed.). Boston, MA: Pearson Education, Inc.

Creswell, J. W., & Clark, V. L. P. (2007). *Designing and conducting mixed methods research.* Thousand Oaks, CA: Sage Publications.

Crockett, D. S. (1979). Academic advising: A cornerstone of student retention. In L. Noel (Ed.), *New directions for student services: Reducing the dropout rate.* San Francisco, CA: Jossey-Bass.

Crookston, B. B. (1972). A developmental view of academic advising as teaching. *Journal of College Student Personnel, 13*(1), 12-17.

Curtis, J. W., & Thornton, S. (2013). Here's the news: The annual report on the economic status of the profession 2012-2013. *Academe, 99*(2), 4-19.

Dalke, C., & Schmitt, S. (1987). Meeting the transition needs of college-bound students with learning disabilities. *Journal of Learning Disabilities, 20*(3), 176-180.

Deshler, D. D., Ellis, E. S., & Lenz, B. K. (1996). *Teaching adolescents with mild disabilities*. Denver, CO: Love Publishing Company.

Dona, J., & Edmister, J. (2001). An examination of community college faculty members' knowledge of the Americans with Disabilities Act of 1990 at the fifteen community colleges in Mississippi. *Journal of Postsecondary Education and Disability, 14*(2), 91-103.

Dowrick, P. W., Anderson, J., Heyer, K., & Acosta, J. (2005). Postsecondary education across the USA: Experiences of adults with disabilities. *Journal of Vocational Rehabiliation, 22*, 41-47.

Drake, J. K. (2011). The role of academic advising in student retention and persistence. *About Campus, 16*(3), 8-12. doi: 10.1002/abc.20062

Dulany, D. E. (1968). Awareness, rules, and propositional control: A confrontation with S-R behavior theory. In T.R. Dixon & D. L. Horton (Eds.), *Verbal behavior and general behavior theory* (pp. 340-387). Englewood Cliffs, NJ: Prentice-Hall.

Earl, W. R. (1988). Intrusive advising of freshmen in academic difficulty. *NACADA Journal, 8*(2), 27-33.

Eckes, S., & Ochoa, T. (2005). Students with disabilities: Transitioning from high school to higher education. *American Secondary Education, 33*(3), 6-20.

Elliott, E. S., & Dweck, C. S. (1988). Goals: An approach to motivation and achievement. *Journal of Personality and Social Psychology*, 54, 5-12.

Ender, S. C. (1994). Impediments to developmental advising. *NACADA Journal, 14*(2), 105-107.

Ender, S. C., & Wilkie, C. J. (2000). Advising students with special needs. In V. N. Gordon & W. R. Habley (Eds.), *Academic advising: A comprehensive handbook* (pp. 118-143). San Francisco, CA: Jossey-Bass.

Ender, S. C., Winston, R. B. Jr., & Miller, T. K. (1982). Academic advising as student development. *New Directions for Student Services, 1982*(17), 3-18.

Ender, S. C., Winston, R. B., Jr., & Miller, T. K. (1984). Academic advising revisited. In R. B. Winston, Jr., T.K. Miller, S.C. Ender, T.J. Grites, & Associates (Eds.), *Developmental academic advising* (pp. 3-34). San Francisco, CA: Jossey-Bass.

Enright, M. S., Conyers, L. M., & Szymanski, E. M. (1996). Career and career-related educational concerns of college students with disabilities. *Journal of Counseling and Development, 75*, 103-114.

Erlich, R. J., & Russ-Eft, D. (2011). Applying social cognitive theory to academic advising to assess student learning outcomes. *NACADA Journal, 31*(2), 5-15.

Farone, M. C., Hall, E. W., & Costello, J. J. (1988). Postsecondary disability issues: An inclusive identification strategy. *Journal of College Student Personnel, 22*, 229-235.

Feldblum, C. R., Barry, K., & Benfer, E. A. (2008). The ADA Amendments Act of 2008. *Texas Journal on Civil Liberties and Civil Rights, 13*(2), 187-199.

Feldman, K. A., & Newcomb, T. M. (1970). *The impact of college on students*. San Francisco, CA: Jossey-Bass.

Fielstein, L. L. (1989). Student priorities for academic advising: Do they want a personal relationship? *NACADA Journal, 9*(1), 33-38.

Fillippino, T. M., Barnett, S., & Roach, S. (2008). Help! Do I have to advise college students, too? *The Mentor*. Retrieved from http://dus.psu.edu/mentor/old/articles/080319tm.htm

Ford, J., & Ford, S. S. (1989). A caring attitude and academic advising. *NACADA Journal, 9*(2), 43-48.

Forrest, K. D. (2003). Overcoming unintentional barriers with intentional strategies: Educating faculty about student disabilities. *Teaching of Psychology, 30*(3), 270-276.

Franklin, E. L. (1997). The 504/ADA as a philosophical basis for advising students. In M. Ramos & D. Vallandingham (Eds.), *Advising students with disabilities* (pp. 13-17). NACADA Monograph Series no. 5. Manhattan, KS: National Academic Advising Association.

Frost, S. H. (1991). *Academic advising for student success: A system of shared responsibility*. ASHE ERIC Higher Education Report No. 3. Washington, DC: The George Washington University.

Frost, S. H. (1993). Developmental advising: Practices and attitudes of faculty. *NACADA Journal, 13*(2), 15-20.

Garrison-Wade, D. F. & Lehmann, J. P. (2009). A conceptual framework for understanding students' with disabilities transition to community college. *Community College Journal of Research and Practice, 33*, 417-445.

Getzel, E. E. (2008). Addressing the persistence and retention of students with disabilities in higher education: Incorporating key strategies and supports on campus. *Exceptionality, 16*, 207-219. doi: 10.1080/09362830802412216

Getzel, E. E., & Thoma, C. A. (2008). Experiences of college students with disabilities and the importance of self-determination in higher education settings. *Career Development for Exceptional Individuals, 31*(2), 77-84.

Gil, L. A. (2007). Bridging the transition gap from high school to college: Preparing students with disabilities for a successful postsecondary experience. *Teaching Exceptional Children, 40*, 12-15.

Goldhammer, R., & Brinckerhoff, L. C. (1992). Self-advocacy for college students. *Their World*, 94-97.

Gordon, V. N. (1988). Developmental advising. In W. R. Habley (Ed.), *The Status and Future of Academic Advising* (pp. 107-118). Iowa City, IA: The ACT National Center for the Advancement of Educational Practices.

Gordon, V. N. (1994). Developmental advising: The elusive ideal. *NACADA Journal, 14*(2), 71-75.

Gormley, S., Hughes, C., Block, L., & Lendman, C. (2005). Eligibility assessment requirements at the postsecondary level for students with learning disabilities: A disconnect with secondary schools? *Journal of Postsecondary Education and Disability, 18*(1), 63-70.

Green, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis, 11*(3), 255-274.

Greenbaum, B., Graham, S., & Scales, W. (1995). Adults with learning disabilities: Educational and social experiences during college. *Exceptional Children, 61*(5), 460-472.

Grites, T. J., & Gordon, V. N. (2000). Developmental academic advising revisited. *NACADA Journal, 20*(1), 12-15.

Grusec, J. E. (1992). Social learning theory and developmental psychology: The legacies of Robert Sears and Albert Bandura. *Developmental Psychology, 28*(5), 776-786.

Habley, W. R. (1982). Academic advising: The critical link in student retention. *NASPA Journal, 18*, 45-50.

Habley, W. R. (1994). Key Concepts in Academic Advising. In *Summer Institute on Academic Advising Session Guide*. Manhattan, KS: National Academic Advising Association.

Habley, W. R. (2003). Faculty advising: Practice and promise. In G. L. Kramer (Ed.), *Faculty advising examined: Enhancing the potential of college faculty as advisors* (pp. 23-39). Bolton, MA: Anker Publishing, Inc.

Habley, W. R. (2004). The status of academic advising: Findings from the ACT sixth annual survey. National Academic Advising Association Monograph Series Number 10. Manhattan, KS: NACADA.

Habley, W. R., Bloom, J. L., & Robbins, S. (2012). *Increasing persistence: Research-based strategies for college student success.* San Franciso, CA: Jossey-Bass.

Habley, W. R., & Morales, R. H. (1998). *Current practices in academic advising: Final report on ACT's fifth National Survey of Academic Advising.* NACADA Monograph Series no. 6. Manhattan, KS: National Academic Advising Association.

Hall, L. M., & Belch, H. A. (2000). Setting the context: Reconsidering the principles of full participation and meaningful access for students with disabilities. *New Direction for Student Services, 91*, 5-17.

Hameister, B. G. (1989). Disabled students. In M. L. Upcraft, J. N. Gardner, & Associates (Eds.), *The freshman year experience: Helping students survive and succeed in college* (pp. 340-351). San Francisco, CA: Jossey-Bass.

Hartman, R. C. (1993). Transition to higher education. In J. Kroeger & J. Schuck (Eds.), *Responding to disability issues in student affairs* (pp. 31-43). San Francisco, CA: Jossey-Bass

Hartmann-Hall, H. M., & Haaga, D. A. F. (2002). College students' willingness to seek help for their learning disabilities. *Learning Disability Quarterly, 25,* 247-261.

Heisserer, D. L., & Parette, P. (2002). Advising at-risk students in college and university settings. *College Student Journal, 36,* 69-83.

Hill, J. L. (1996). Speaking out: Perceptions of students with disabilities regarding adequacy of services and willingness of faculty to make accommodations. *Journal of Postsecondary Education and Disability, 12*(1), 22-43.

Houck, C. K., Asselin, S. B., Troutman, G. C., & Arrington, J. M. (1992). Students with learning disabilities in the university environment: A study of faculty and student perceptions. *Journal of Learning Disabilities, 25*(10), 678-684.

Humphrey, M., Woods, L., & Huglin, L. (2011). Increasing faculty awareness of students with disabilities: A two-pronged approach. *Journal of Postsecondary Education and Disability, 24*(3), 255-261.

Hunter, M. S., & White, E. R. (2004). Could fixing academic advising fix higher education? *About Campus, 9*(1), 20-25.

Individuals With Disabilities Education Act (IDEA) of 1997 Pub. L. No. 105-17, 104 Stat. 1142.

Jones, S. R. (1996). Toward inclusive theory: Disability as social construction. *NASPA Journal, 33,* 347-354.

Jordan, P. (2000). Advising college students in the 21st century. *NACADA Journal, 20*(2), 21-30.

Kalivoda, K. S., & Higbee, J. L. (1989). Students with disabilities in higher education: Redefining access. *Journal of Educational Opportunity, 4*(1), 14-21.

Karabenick, S. A. (2004). Perceived achievement goal structure and college student help seeking. *Journal of Educational Psychology, 96*(3), 569-581.

King, M., & Kerr, T. (2005). Academic advising. In M. L. Upcraft, J. Gardiner, & B. O. Barefoot (Eds.), *Challenging and supporting the first-year student: A handbook for improving the first year of college* (pp. 320-338). San Francisco, CA: Jossey-Bass.

Kiuhara, S. A., & Huefner, D. S. (2008). Students with psychiatric disabilities in higher education settings: The Americans with Disabilities Act and beyond. *Journal of Disability Policy Studies, 19*(2), 103-113.

Kleinert, H. L., Jones, M. M., Sheppard-Jones, K., Harp, B., & Harrison, E. M. (2012). Students with intellectual disabilities going to college? Absolutely! *Teaching Exceptional Children, 44*(5), 26-35.

Knight, T. M. (2000). Planting the seeds of success: Advising college students with disabilities. *The Mentor*. Retrieved from http://dus.psu.edu/mentor/old/articles/000517tk.htm

Kramer, G. (2003). Advising as teaching. In G. Kramer (Ed.), *Faculty advising examined: Enhancing the potential of college faculty as advisors.* (pp. 1-20). Bolton, MA: Anker Publishing, Inc.

Kramer, G. L. (1988). Enhancing the role of academic advising on the college campus. *NACADA Journal, 8*(1), 3-6.

Kramer, G. L., & Spencer, R. W. (1989). Academic advising. In M. L. Upcraft, J. N. Gardner, & Associates (Eds.), *The freshman year experience: Helping students survive and succeed in college* (pp. 95-107). San Francisco, CA: Jossey-Bass.

Kuhn, T. L. (2008). Historical foundations of academic advising. In V. N. Gordon, W. R. Habley, & T. J. Grites (Eds.). *Academic advising: A comprehensive handbook* (pp. 3- 16). San Francisco, CA: Jossey-Bass.

Laff, N. S. (1994). Reconsidering the developmental view of advising: Have we come a long way? *NACADA Journal, 14*(2), 46-49.

Lechtenberger, D., Barnard-Brak, L., Sokolosky, S. & McCrary, D. (2012). Using wraparound to support students with developmental disabilities in higher education. *College Student Journal, 46*(4), 856-866.

Light, R. J. (2001). *Making the most of college: Students speak their minds*. Cambridge, MA: Harvard University Press.

Lopez, M., Yanez, M., Clayton, E. R., & Thompson, D. A. (1988). Intrusive advising with special student populations. *NASPA Journal, 25*, 195-201.

Lowenstein, M. (2005). If advising is teaching, what do advisors teach? *NACADA Journal, 25*(2), 65-73.

Lucas, C. J. (2006). *American higher education: A history.* New York, NY: Palgrave McMillan.

Lynch, R. T. & Gussel, L. (1996). Disclosure and self-advocacy regarding disability-related needs: Strategies to maximize integration in postsecondary education. *Journal of Counseling and Development, 74*(4), 352-357.

Madaus, J. W. (2005). Navigating the college transition maze: A guide for students with learning disabilities. *Teaching Exceptional Children, 37*(3), 32-37.

Maes, A. (n.d.) The Americans with Disabilities Act—Time to measure the efficacy of this legislation. Retrieved from https://www.michbar.org/journal/article.cfm?articleID=163&volumeID=14&viewType=archive

Mamiseishvili, K., & Koch, L. C. (2010). First-to-second-year persistence of students with disabilities in postsecondary institutions in the United States. *Rehabilitation Counseling Bulletin, 54*(2), 93-105. doi: 10.1177/0034355210382580

Mamiseishvili, K., & Koch, L. C. (2012). Students with disabilities at 2-year institutions in the United States: Factors related to success. *Community College Review, 40*(4), 320-339. doi: 10.1177/0091552112456281

Mangold, W. D., Bean, L. G., Adams, D. J., Schwab, W. A., & Lynch, S. M. (2003). Who goes who stays: an assessment of the effect of a freshman mentoring and unit registration program on college persistence. *Journal of College Student Retention: Research, Theory, & Practice, 4*(2), 95-122.

McLaughlin, C. (1995). Disability support services. In R. E. Glennen & F. Y. Vowell (Eds.), *Academic advising as a comprehensive campus process* (pp. 65-68). NACADA Monograph Series no. 2. Manhattan, KS: National Academic Advising Association.

McMillan, J. H., & Schumacher, S. (2001). *Research in education: A conceptual introduction* (5th ed.). New York, NY: Longman.

Melander, E. R. (2002). The meaning of "student-centered" advising: Challenges to the learning community. *The Mentor.* Retrieved from: http://dus.psu.edu/mentor/old/articles/021127em.htm

Mellblom, C., & Hart, G. (1997). The faculty member's role in advising students with disabilities. In M. Ramos & D. Vallandingham (Eds.), *Advising students with disabilities* (pp. 33-36). NACADA Monograph Series no. 5. Manhattan, KS: National Academic Advising Association.

Mercer, C. D. (1997). *Students with disabilities* (5th ed.). Columbus, OH: Merrill/Prentice Hall.

Merriam, S. B. (1998). *Qualitative research and case study applications in education: Revised and expanded from case study research in education.* San Francisco, CA: Jossey-Bass.

Metzner, B. S. (1989). Perceived quality of academic advising: The effect on freshman attrition. *American Educational Research Journal, 26*(3), 422-442.

Moore, K. M. (1976). Faculty advising: Panacea or placebo? *Journal of College Student Personnel, 17*, 371-375.

Mull, C., Sitlington, P. L., & Alper, S. (2001). Postsecondary education for students with learning disabilities: A synthesis of the literature. *Exceptional Children, 68(1),* 97-118.

Murray, C., Lombardi, A., Wren, C. T., & Keys, C. (2009). Associations between prior disability-focused training and disability-related attitudes and perceptions among university faculty. *Learning Disability Quarterly, 32,* 87-100.

National Joint Committee on Learning Disabilities. (2007). The documentation disconnect for students with learning disabilities: Improving access to postsecondary disability services: A report from the National Joint Committee on Learning Disabilities July 2007. *Learning Disability Quarterly, 30*(4), 265-274.

Noel, L. T. (1976). College student retention: A campus-wide responsbility. *The National ACAC Journal, 21*, 33-36.

Nutter, K. J., & Ringgenberg, L. J. (1993) Creating positive outcomes for students with disabilities. *New Directions for Student Services, 64*, 45-58.

O'Banion, T. (1994). An academic advising model. *NACADA Journal,14*(2), 10-16. (Reprinted from *Junior College Journal,* 1972, *42*(6), 62-69).

O'Brien, E. A., & Wright-Tatum, P. (1997). Advising students with disabilities—Separate but equal? In M. Ramos & D. Vallandingham (Eds.), *Advising Students with Disabilities* (pp. 19-22). NACADA Monograph Series no. 5. Manhattan, KS: National Academic Advising Association.

Padgett, V. R., & Reid, J. F., Jr. (2003). Five year evaluation of the Student Diversity Program: A retrospective quasi-experiment. *Journal of College Student Retention: Research, Theory, & Practice, 4*(2), 135-145.

Palmer, C., & Roessler, R. T. (2000). Requesting classroom accommodations: Self-advocacy and conflict resoluation training for students with disabilities. *Journal of Rehabilitation, 66*(3), 38-43.

Pardee, C. F. (1994). We profess developmental advising, but do we practice it? *NACADA Journal, 14*(2), 59-61.

Park, H. J., Roberts, K. D., & Stodden, R. (2012). Faculty perspectives on professional development to improve efficacy when teaching students with disabilities. *Journal of Postsecondary Education and Disability, 25*(4), 37-383.

Patton, M. Q. (2002). *Qualitative evaluation and research methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Platt, C. W. (1988). Effects of causal attributions for success on first-term college performance: A covariance structure model. *Journal of Educational Psychology, 80*(4), 569-578.

Ponticelli, J. E., & Russ-Eft, D. (2009). Community college students with disabilities and transfer to a four-year college. *Exceptionality, 17*, 164-176.

Preece, J. E., Roberts, N. L., Beecher, M. E., Rash, P. D., Shwalb, D. A., & Martinelli, E. A., Jr. (2005). Students with emotional disabilities: Responding to advisors' concerns and questions. *NACADA Journal, 25*(1), 42-46.

Preece, J. E., Beecher, M. E., Martinelli, E. A., Jr., & Roberts, N. L. (2007). Academic advisors and students with disabilities: A national survey of advisors' experiences and needs. *NACADA Journal, 27*(1), 57-72.

Prentice, M. (2002). Serving students with disabilities at the community college (Report No. EDO-JC-0202). Los Angeles, CA: ERIC Clearinghouse for Community Colleges. Retrieved from http://www.eric.ed.gov/PDFS/ED467984.pdf

Qualtrics. (2013). (Version 49,454) [online survey software]. Provo, UT: Qualtrics

Quick, D., Lehman, J., & Deniston, T. (2003). Opening doors for students with disabilities on community college campuses: What have we learned? What do we still need to know? *Community College Journal of Research and Practice, 27*(9-10), 815-827.

Ramos, M. (1997). Advising students with disabilities—Is there a difference? In M. Ramos & D. Vallandingham (Eds.), *Advising students with disabilities* (pp. 5-11). NACADA Monograph Series no. 5. Manhattan, KS: National Academic Advising Association.

Rao, S. (2004). Faculty attitudes and students with disabilities in higher education: A literature review. *College Student Journal, 38*(4), 191-198.

Raskin, M. (1979). Critical issues: Faculty Advising. *Peabody Journal of Education, 56*(2), 99-108.

Rehabilitation Act of 1973, Pub. L. No. 93-112, 29 U.S.C. § 701 (1973).

Reiff, H. B. (1997). Academic advising: An approach from learning disabilities research. *Journal of Counseling and Development, 75*, 433-441.

Reiff, H. B., & deFur, S. (1992). Transition for youths with learning disabilities: A focus on developing independence. *Learning Disability Quarterly, 15*, 237-250.

Rocco, T. (2002). Helping adult educators understand disability disclosure. *Adult Learning, 12*(2), 10-12.

Rokeach, M. (1973). *The Nature of Human Values*. New York, NY: Free Press.

Saracoglu, B., Minden, H., & Wilchesky, M. (1989). The adjustment of students with learning disabilities to university and its relationship to self-esteem and self-efficacy. *Journal of Learning Disabilities, 22*(9), 590-592

Saunders, S. A., & Ervin, L. (1984). Meeting the special advising needs of students. In R. B. Winston, Jr., T. K. Miller, S. C. Ender, T. J. Grites & Associates (Eds.), *Developmental academic advising* (pp. 250-286). San Francisco, CA: Jossey-Bass.

Schreiner, L. A., & Anderson, E. (2005). Strengths-based advising: A new lens for higher education. *NACADA Journal, 25*(2), 20-29.

Schunk, D. H. (1985). Participation in goal-setting: Effects on self-efficacy and skills of learning disabled children. *Journal of Special Education, 19*, 307-317.

Schunk, D. H. (1991). Self-efficacy and academic motivation. *Educational Psychologist, 26*, 207-231.

Scott, S. S. (1990). Coming to terms with the "otherwise qualified" student with a learning disability. *Journal of Learning Disabilities, 23*(7), 398-405.

Scott, S. S., & Gregg, N. (2000). Meeting the evolving needs of faculty in providing access for college students with learning disabilities. *Journal of Learning Disabilities, 33*(2), 158-167.

Self, C. (2008). Advising delivery: Professional advisors, counselors, and other staff. In V. N. Gordon, W. R. Habley, & T. J. Grites (Eds.), *Academic advising: A comprehensive handbook* (2nd ed., pp. 267-278). San Francisco: Jossey-Bass.

Shaw, S. F. & Scott, S. S. (2003). New directions in faculty development. *Journal of Postsecondary Education and Disability, 17*(1), 3-9.

Smith-Fess Act (Civilian Vocational Rehabilitation Act) of 1920, Pub. L. No. 66-236

Snyder, S. L. (2005). Geographies of uneven development: How does one make disability integral to higher education? *Publications of the Modern Language Association, 120*(2), 533-541.

Stage, E. K., & Milne, N. (1996). Invisible scholars: Students with learning disabilities. *Journal of Higher Education, 67*(4), 426-445.

Stodden, R. A., Whelley, T., Chang, C., & Harding, T. (2001). Current status of education support provision to students with disabilities in postsecondary education. *Journal of Vocational Rehabilitation, 16*(3/4), 189-198.

Tashakkori, A., & Teddlie, C. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Los Angeles, CA: Sage Publications.

Thomas, R. E., & Chickering, A. W. (1984). Foundations for academic advising. In R. B. Winston, Jr., T. K. Miller, S. C. Ender, T. J. Grites & Associates (Eds.), *Developmental academic advising* (pp. 89-118). San Francisco, CA: Jossey-Bass.

Thompson, A., Bethea, L., & Turner, J. (1997). Faculty knowledge of disability law in higher education: A survey. *Rehabilitation Counseling Bulletin, 40*(3). 166-180.

Tincani, M. (2004). Improving outcomes for college students with disabilities: Ten strategies for instructors. *College Teaching, 52*(4), 128-132.

Tinto, V. (1987). *Learning college: Rethinking the causes and cures of student attrition.* Chicago, IL: University of Chicago Press.

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research, 45*, 89-125.

Trammell, J., & Hathaway, M. (2007). Help seeking patterns in college students with disabilities. *Journal of Postsecondary Education and Disability, 20*(1), 5-15.

Trombley, T. B., & Holmes, D. (1981). Defining the role of academic advising in the industrial setting: The next phase. *NACADA Journal, 1*, 1-8.

Tuttle, K. N. (2000). Academic advising. *New Directions for Higher Education, 2000*(111), 15-24.

Upcraft, M. L., & Gardner, J. N. (1989). Disabled students. In M. L. Upcraft, J. N. Gardner, & Associates (Eds.), *The freshman year experience: Helping students survive and succeed in college* (pp. 340-351). San Francisco, CA: Jossey-Bass.

U.S. Department of Education, National Center for Education Statistics (NCES). (2012). *Digest of Education Statistics, 2012* (NCES 2012-001), Table 242.

U.S. Government Accountability Office (GAO). (2009). *Higher education and disability: Education needs a coordinated approach to improve its assistance to schools in supporting students*. (GAO-10-33). Retrieved from http://www.gao.gov/new.items/d1033.pdf

Vasek, D. (2005). Assessing the knowledge base of faculty at a private, four-year institution. *College Student Journal, 39*(2), 307-315.

Vogel, S. A., Leyser, Y., Burgstahler, S., Sligar, S. R., & Zecker, S. G. (2006). Faculty knowledge and practices regarding students with disabilities in three contrasting institutions of higher education. *Journal of Postsecondary Education and Disability, 18*(2), 109-123.

Vowell, F., & Farren, P. J. (2003). Expectations and training of faculty advisors. In G. L. Kramer (Ed.), *Faculty advising examined: Enhancing the potential of college faculty as advisors* (pp. 55-87). Bolton, MA: Anker Publishing, Inc.

Wagner, M., Newman, L., Cameto, R., Garza, N., & Levine, P. (2005). *After high school: A first look at the postschool experiences of youth with disabilities. A report from the National Longitudinal Transition Study-2 (NLTS2).* Retrieved from http://www.nlts2.org/reports/2005_04/nlts2_report_2005_04_complete.pdf

Wallace, S. (2013). *Implications for faculty advising 2011 national survey*. Retrieved from http://www.nacada.ksu.edu/Resources/Clearinghouse/View-Articles/Implications-for-faculty-advising-2011-National-Survey.aspx

Walsh, S. (2002, October 29). Study finds significant increase in number of part-time and non-tenure-track professors. *The Chronicle of Higher Education.* Retrieved from http://chronicle.com/article/Study-Finds-Significant/116810/

Welch, P. (1995). *Strategies for teaching universal design*. Boston, MA: Adaptive Environments Center.

White, G. W., & Vo, Y. T. H. (2006). Requesting accomodations to increase full participation in higher education: An analysis of self-advocacy training for postsecondary students with learning and other disabilities. *Learning Disabilities: A Multidisciplinary Journal, 14*(1), 41-56.

White, E., & Schulenberg, J. (2012). Academic advising—A focus on learning. *About Campus, 16*(6), 11-17. doi: 10.1002/abc.20082

Wilder, J. R. (1981). Academic advisement: An untapped resource. *Peabody Journal of Education, 58*(4), 188-192.

Wilson, K., Getzel, E., & Brown, T. (2000). Enhancing the postsecondary campus climate for students with disabilities. *Journal of Vocational Rehabilitation, 14*, 37-50.

Winston, R. B., & Sandor, J. A. (1984). Developmental academic advising: What do students want? *NACADA Journal, 4*(1), 5-12.

Wiseman, R. L., Emry, R. A., & Morgan, D. (1988). Predicting academic success for disabled students in higher education. *Research in Higher Education, 28*(3), 255-269.